Communication in the Workplace: A Collaborative Teacher-Student Research Project

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Preview

◆ How we did the study
◆ Results: patterns of writing and speaking in the workplace
◆ Results: differences among professions
◆ What did students learn? What do teachers learn?
◆ Acknowledgements
How we did the study

- Spring, 2001
- 36 sections of ENG 331,332,333
- 725 interviews conducted

- Ag & Life Sci = 123
- Design = 3
- Education = 9
- Engineering = 258
- Undergrad Studies = 8
- Hum & Soc Sci = 12
- Management = 190
- Natural Resources = 22
- Phys & Math Sci = 42
- Textiles = 48
- Undetermined = 10
Data gathering

- Standard assignment for all 36 sections: conduct interview, complete questionnaire, collect samples, write memo report to program director, submit 2 copies of report & attachments
- Standard questionnaire (see handout)
- Supplementary discussion questions
Data analysis

- Data entry from questionnaires
- Descriptive statistics: means
- Factor analysis for # 7, 10, 11, 13
- ANOVA to compare professions
Qualitative analysis

- Code student reports into Excel™ file
- Categories from 1996 study: rhetorical situation, writing process, technology, international, workplace socialization, learning, oral communication
- Pull quotations from professionals and from students
Communication in the workplace:
What can NC State students expect?

A research report by Carolyn R. Miller, Jamie Larsen, and Andy Huyck

Professional Writing Program
Department of English
North Carolina State University
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Click here for a PDF version of the full report
Results: Respondents

- Database reduced to 632 professionals
- 60% work in large companies (>500)
- 74% work for private industry
- 56% NC State graduates
- 59% same degree as student
- 1990 average year of graduation
Professions of respondents

- Education = 8% (51)
- Engineering = 22% (136)
- Finance, Accounting = 12% (76)
- Management = 23% (145)
- Marketing & Sales = 11% (67)
- Programming = 11% (72)
- Research = 13% (85)
“There is not a day that goes by at work that I am not reading, writing, or editing.”

Figure 1. Amount of time spent writing at work
“Things are always proofread and approved by several other engineers.”

Figure 2. Amount of time spent writing collaboratively at work

- N = 601
"Every document is a reflection of me, my work, and those I represent."

Figure 3. Importance of writing quality to job performance

<table>
<thead>
<tr>
<th>% of respondents</th>
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<tbody>
<tr>
<td>Essential</td>
</tr>
<tr>
<td>Very Imp</td>
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<tr>
<td>Important</td>
</tr>
<tr>
<td>Unimp</td>
</tr>
<tr>
<td>Irrelevant</td>
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</tbody>
</table>

N = 606
“Ineffective writing could cause me to lose a sale and consequently fail at my job.”
“Anyone who is not a skilled writer will be viewed as unintelligent.”

Figure 5. Importance of writing quality to job performance by size of organization.
"Lack of writing ability is a huge handicap. I would say it is probably the major thing that holds back people from being successful professionally."

Figure 6. Importance of writing quality to job performance by experience level

![Bar chart showing the importance of writing quality by experience level.](chart_image)
Speaking on the job

- Face-to-face, one-on-one = 40%
- Phone = 30%
- Group meetings = 36%
- Group teleconferences = 8%

“You can’t always communicate with writing. Sometimes you have to rely on your speaking skills to get your message across.”
Global communication

- 67% of professionals communicate internationally
- Researchers specifically noted the importance to science
- E-mail is the most frequent means of international communication
Learning how to write

- 57% had taken a college technical, business, or scientific writing course
- 49% stated the course was required

“The technical writing class at NCSU was very valuable in teaching me how to organize a document so that someone seeking information may read it quickly.”
Differences among professions

◆ Factor analysis showed that writing and speaking patterns were closely related to audience, regardless of size of organization or job title.

◆ Analysis of variance showed significant differences among professions for seven variables.
Engineering (136)

- Least communication with general public—both written and oral (1-2%)
- Least collaborative writing (18%)
- Most one-on-one oral communication (44%)
- Most written communication with managers (38%)
- Most teleconferences (12%)
- Most oral communication with managers (24%)
- Most oral communication with vendors (14%)

“Ineffective writing is like shooting yourself in the foot.”
Engineering

Audiences
◆ OSHA
◆ Human Resources
◆ Safety Engineers
◆ FDA
◆ Production Workers
◆ Maintenance Personnel

Documents
◆ Purchase Orders
◆ Specifications
◆ Contracts
◆ Protocols
◆ SOP’s
◆ Test Reports
◆ White Papers
◆ Feasibility Studies
Marketing & Sales (67)

- Least writing to peers (11% vs. 35%)
- Most written memos and letters
- Most global communication with customers (42% vs. 27% overall)
- Least oral communication in group meetings (28%)

“If the matter is important and affects our business, it will go on paper to protect the company.”
Marketing & Sales

Audiences
- Sales Reps
- Media
- Partners
- CEO
- Customers
- Managers

Documents
- Price Letters
- Progress Reports
- Proposals
- Budget Reports
- Shipping Reports
- Project Quotes
- Work Orders
- Press Releases
Major differences from 1996

- Somewhat fewer took writing course
- Time spent writing slightly higher
- Time collaborating slightly higher
- E-mail now most frequent written form; face-to-face meeting most frequent oral form.
What did students learn?

“I found it *interesting* to see the wide audience ... and how he must change his style to fit the reader.”

“I found it *amazing* how severe the consequences were if the quality of his documents was not exceptional. One mistake could cause him to lose his job or the company to lose a contract.”

“It *shocked* me to learn how much time is spent communicating professionally, especially for a salesperson.”
What do we learn?

- Communication plays central role in workplace
- Differences and diversity across professions
- Some differences from 1996, many similarities
- Workplace can inform but should not dictate curriculum
Acknowledgments

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Questions?
Discussion?