

**Public Speaking
and Technical
Writing Skills**
for Engineering Students

P. Aarne Vesilind

Second Edition

LAKESHORE PRESS



PUBLIC SPEAKING AND
TECHNICAL WRITING
SKILLS
FOR ENGINEERING
STUDENTS

Second Edition

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ABOUT THE AUTHOR

A NOTE TO THE INSTRUCTOR

During the past decades it has become quite clear that communication skills continue to be a most important aspect of professional engineering, and the need to improve these skills across our profession has been recognized by the Accreditation Board for Engineering and Technology (ABET). Engineering communication skills differ from those in other professions and thus it makes sense to introduce these within the engineering curriculum.

This Second Edition of *Public Speaking and Technical Writing Skills for Engineering Students* has been significantly updated and revised in response to the needs of instructors who have used it in their classes. The most important changes are the inclusion of a major section on writing style and the use of PowerPoint software. Also new is a chapter on the skills necessary for conversing one-on-one with clients, reporters, lawyers, and prospective employers.

The last chapter of this book is a discussion on the ethics of engineering communication. In using this book for instruction, the ethics of communication can be introduced separately, or, as is the case with most instructors, the ideas in the last chapter can be infused throughout the discussions on speaking and writing. When I taught this material I used three class periods for the writing and speaking topics and introduced ethical concerns throughout the course. An alternate method is to introduce ethics immediately following the chapters on speaking and writing. Either way, ABET emphasizes that ethics represents a major part of an engineering education and has made this a requirement for accreditation. Introducing professional ethics with technical communication skills affords a useful and efficient way of covering both topics.

An instructor's manual for this book is available. Please contact Lakeshore Press, P. O. Box 92, Woodsville, NH 03785, telephone 603-747-8083.

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To the student:

A reward of university teaching is keeping track of graduates to find out how they're doing. I recently visited with a graduate well on her way to a highly successful career in consulting engineering. When I asked what skills helped her to advance so rapidly, she replied, "I can get up in front of a group of people and be understood."

Another former student saw me at a soccer game and came running over. "I've been waiting to tell you something," he said breathlessly. "Remember those one-page memos you made us write? You would not believe how important that is in my work."

These graduates illustrate that excellent speaking and writing are essential to successful engineering. As a practicing engineer, you will likely present proposals to clients or funding agencies, explain designs and budgets at town meetings, lead design teams in a large firm, and write project reports. You will, in fact, spend 80% of your professional time speaking and writing.

This book can help you to hone your speaking and writing skills while learning about forms of communication unique to engineering practice. I hope this book will also serve you as a post-graduation reference, especially for engineering writing.

P. Aarne Vesilind, Ph.D., P.E.

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