

About Our Staff



Prof. Marie Paretti, Co-Director, holds a Ph.D. in English as well as a B.S. in Chemical Engineering. She has worked as an engineer, a technical writer, and an educator, teaching in and directing technical communications programs for two decades. At Virginia Tech, she has been the Director of the Engineering Communications Program for Materials Science and Engineering and Engineering Science and Mechanics since 2003.



Prof. Lisa McNair, Co-Director, holds a Ph.D. in Linguistics. She joined Engineering Education in Fall 2005 after serving as Associate Director of Technical Communications at Georgia Tech. There she coordinated curriculum development to bring workforce data into communications courses. In addition to teaching writing, she has designed multimedia education materials in science and in conflict resolution, and has worked as a technical writer.



Prof. Michael Alley, Senior Fellow, has an M.F.A. in Writing, an M.S. in Electrical Engineering and a B.S. in Engineering Physics and is a widely recognized leader in technical and scientific communication. He has authored three textbooks and his workshops on effective technical and scientific writing and presentations are sought-after both nationally and abroad. He has been Director of Engineering Communications in Mechanical Engineering and Electrical and Computer Engineering since 1999.

Engineering Education: VTECC is housed in the Department of Engineering Education (EngE), in the College of Engineering. EngE promotes cutting-edge research and practice in teaching the next generation of engineers.

Contact Us

As a newly organized Center in Virginia Tech's College of Engineering, VTECC builds upon the success of nationally recognized engineering communications programs in the departments of Engineering Science and Mechanics (begun in 1996), Materials Science and Engineering (begun in 1994), Mechanical Engineering (begun in 1999), and Electrical and Computer Engineering (begun in 2000).

We are available for consultations with individual faculty as well as departmental committees, assessment teams, and curriculum planners to discuss ways that VTECC can support or enhance programmatic efforts to develop students' professional skills.

In addition, in 2006-07, VTECC faculty will begin offering graduate courses through the Engineering Education Department to support the work of graduate students and faculty. Planned courses (pending departmental, college, and university approval) include:

- Proposing Engineering Research (1 credit)
- Documenting Engineering Research (1 credit)
- Presenting Engineering Research (1 credit)
- Evaluating and Responding to Communication Assignments in Engineering Courses (1 credit)
- Communication in Engineering Curricula: Theory, Practice, and Pedagogy (3 credits)

For more information or to set up an appointment, please contact the VTECC directors:

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Lisa McNair: lmcnair@vt.edu, 540-231-1144



VTECC:

The Virginia Tech Engineering Communications Center



Professional Development in the College of Engineering

Co-Directors:
Professor Marie C. Paretti
Professor Lisa McNair

VTECC: Tools for the Future

The Virginia Tech Engineering Communications Center is dedicated to providing engineering departments with the tools they need to educate students for today's workplace.

Consultations with departments to develop, integrate, and assess communication and collaboration skills targeted to the needs of the contemporary workplace.

Teaching support in various forms, including team-teaching arrangements and individual course lectures on topics in communication and collaboration relevant to engineering students.

Workshops and lectures open to faculty, teaching assistants, graduate students and the public on a wide range of topics, including:

- teaching and evaluating assignments
- facilitating teamwork and conflict management
- collaborating across disciplines
- applying for fellowships
- writing proposals
- presenting research orally

Multidisciplinary networks that create communities of first-year students, upper-class students, graduate students, and practicing engineers to foster professional development.

Cutting-edge research that explores both the university and the workplace. Educators still have more to learn about how to best develop communication and collaboration skills in students, not only at Virginia Tech but across the nation. At the same time, companies need research to help develop best practices for communication and collaboration in globally distributed, technology-driven workplaces.

The 21st Century Engineer

Today's engineers need to supplement technical expertise with top-notch professional skills to thrive in the global marketplace.



- *What will U.S. engineers need to excel in our rapidly developing global economies?*

Superior communication and collaboration skills.

- *What should universities do to meet new accreditation standards for communication and teamwork skills?*
- **Build and deliver focused teaching practices that meet the needs of students and faculty.**
- *How do people learn to better communicate? How should we be teaching communication?*

Practice, practice, practice—and some judicious application of education theory. Students learn best when communication skills are integrated across curricula in a range of discipline-specific contexts.

- *How do we attract and develop engineering professionals from all backgrounds, including historically underrepresented groups?*

By establishing supportive communities that mentor students effectively while providing meaningful benefits for society.

Serving Our Constituents

VTECC takes the university motto, *Ut Prosim*, to heart as we use our expertise to serve our constituents. We put our knowledge to work to benefit the larger engineering community:

Faculty: We help engineering faculty integrate communication and collaboration skills into courses efficiently and effectively.

Undergraduate Students: We enable students to reach audiences and transform communication skills into a power tool. We also provide a community that wants to share its expertise to help students succeed academically and professionally.



Graduate Students: We help graduate students make this transitional part of their career successful as they gain vital skills that will serve both their research and their teaching needs.

Engineering Professionals and VT Alumni: We provide an opportunity to stay current with VT Engineering. We invite professionals to join us in mentoring the engineers of tomorrow as they discover the expectations of today's workplace.

Research Communities: We contribute to many fields of research through funded studies, publications, and conferences, including:

- American Society of Engineering Education
- Frontiers in Education
- Society of Technical Communication
- IEEE Professional Communication Society