

# Cedarville University Technical and Professional Communication

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**Abstract.** This article describes the development and program history for the Technical and Professional Communication undergraduate major at Cedarville University. The article includes program distinctives, as well as profiles of students, graduates, faculty, and facilities.

**Keywords.** assessment, client-based projects, curriculum development, Industry Advisory Board, rhetorical theory, technical communication, theory and practice

Cedarville University (CU) is a Christ-centered, Baptist university of arts, sciences, and professional and graduate programs. Located on 400 acres at the north edge of the village of Cedarville, Ohio, Cedarville University was founded in 1916. In 2009, 3,038 undergraduate students were enrolled. Forty-nine states and 13 foreign countries are represented by the student body. Thirty-one students were declared technical and professional communication majors. CU has a 14:1 student/faculty ratio.

## Program History

### The Beginning

In 1984, during a meeting of the Department of Language and Literature, the then-Chair Edward Spencer asked faculty, "What could we do to make our majors more marketable?" At the time, the department housed three majors: literature, English/secondary education, and Spanish. No one responded to the question. After an awkward silence, I said, "We could develop a technical writing program." Everyone immediately thought that was a great idea and that I should do that. In a few short weeks, I found myself enrolled in the 35<sup>th</sup> Annual Technical Writing Institute for Teachers at Rensselaer Polytechnic Institute in Troy, New York. There I learned from seasoned technical writers and technical writing teachers such as James Souther, David Carson, David Porush, Lee Odell, Robert Krull, Jeff Hibbard, James Kinneavy, Philip Rubens, Merrill Whitburn, and the distinguished professor Jay R. Gould.

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Two months after leaving Rensselaer, I submitted a proposal to Cedarville College proposing a professional writing minor in the Department of Language and Literature. The minor consisted of the following five courses (At the time Cedarville College was on the quarter system):

***Style and Mechanics for Writers: 3 hours***

A prescriptive approach to a clear, concise prose that is grammatically correct.

***Professional Writing: 5 hours***

An introduction to basic technical communication in which students learn oral and written communication with the use of effective visuals.

***High Technology for Professional Writers: 3 hours***

Guest speakers will lecture on introductory material in the fields of engineering, electronics, physics, and computers; students will have hands-on experience with word processing; experience editing technical articles related to these fields.

***Report Writing and Technical Editing: 4 hours***

A study of the techniques necessary for writing clear, well-organized reports of various kinds and experience in editing technical articles in preparation for a profession in technical editing.

***Advanced Professional Writing: 4 hours***

An on-the-job simulation of work for which technical writers are responsible with an emphasis on deadlines, accuracy, effective, professional communication; resume preparation and practice in job interviews; preparation for professionalism.

The remaining forty hours of the major consisted of specific courses in literature determined by the department.

The proposal was accepted and classes were offered the fall of 1985 with thirteen students enrolled in the minor:

*The technical writing program came at a perfect time for me. I wanted to be an English major, but I didn't really want to teach. This was exactly what I was looking for. The program gave me valuable tools for my future. Kevin Shaw, 1987 graduate*

**Changes Come**

In 1992, we hired an additional faculty member to teach in the professional writing program. Donald Humphreys, a 1989 graduate of the program, had just finished an MA in technical and scientific communication at Southern Polytechnic

while working for IBM in Atlanta. With his arrival, we moved the professional writing minor to a major in the Language and Literature Department.

In 1999, we changed the name of the major from professional writing to technical and professional communication (TPC). By then we had added several new courses. The program now included the following requirements:

<b>Course Number</b>	<b>Course Name</b>	<b>Qt. Credit Hours</b>
ENG 223	Advanced Composition	3
ENG 307	Advanced Grammar	5
TPC 210	Proofreading	3
TPC 301	Style and Mechanics for Writers	4
TPC 302	Technical Marketing Communication	5
TPC 303	The Technical Communicator in a Corporate Culture	3
TPC 316	Technical Communication	5
TPC 317	Graphic Design	5
TPC 318	Instructional Design	5
TPC 402	Designing Information for the Web	4
TPC 413	Technical Editing	3
TPC 414	Report Writing	5
TPC 415	Special Topics	5
TPC 419	Design of Manuals	5
TPC 420	Designing Online Information	5

In 2000, Cedarville College became a university, and in 2002, Cedarville made the change from quarters to semesters. During our planning for the change to semesters, we took the opportunity to propose the following new courses:

<b>Course Number</b>	<b>Course Name</b>	<b>Sem. Credit Hours</b>
TPC 2000	Production Tools for Technical Communicators	3
TPC 3020	Professional Portfolio Development I	1
TPC 4020	Professional Portfolio Development II	1
TPC 4160	Internship	10

The Internship was a significant addition. In the past, it had been highly recommended, but now it became a requirement.

During the next years, faculty came and went. Currently, I continue to serve as the director of the program and to teach the majority of the courses. In 2009, we added the following courses:

Course Number	Course Name	Sem. Credit Hours
TPC 3180	Visual Rhetoric	2
TPC 4090	Designing Online Information II	3
TPC 4140	Instructional Design II	3

For a full listing of current requirements, see <http://www.cedarville.edu/courses/catalog/current/II.pdf>, p. 123.

## Student and Graduates

When the program began as a professional writing minor, many students enrolled not understanding the true technical nature of the program. Those who wanted to write the great American novel were frustrated. However, the program enjoyed large enrollment. At its peak, enrollment reached as high as 48 majors. In 1999, when the name of the program was changed to technical and professional communication, numbers began to drop, as we anticipated they would. We found that first-year students rarely come to college knowing anything about technical communication. They don't know we exist and they don't know what they can do with the major. In 2006, fall enrollment showed eleven students declared in the major, with zero first-year students. With talk from the administration about shutting down the program, I took a fifteen-minute presentation to each of the twenty-five sections of first-year composition and talked about our TPC program and the success students had in the job market. By the end of two weeks, the enrollment had doubled to twenty-two. I have continued to recruit from the first-year classes each year, and we have started the Fall 2009 semester with thirty-one declared students.

Students in the program like to write. And they have usually had a very successful time in high school English classes, but they don't want to teach. When they are presented with a major that requires excellent writing skills and still gives them an opportunity to find a job that pays the rent and allows them to actually pay their college loans, they are eager to start the program.

Our TPC graduates work in a variety of writing and communication environments, including IBM, Dell, Procter & Gamble, McGraw Hill Publishing Company, Yellow Springs Instrument, ExactTarget, and many other organizations of all sizes.

Over the years, graduates of the program have pursued both master's and doctorate degrees. They tout graduate degrees from Southern Polytechnic, Miami University, The Ohio State University, and Rensselaer Polytechnic Institute, to name a few. They report management positions in many different organizations.

Students find challenging internships. In the early days, internships were difficult to find. I spent hours on the phone with prospective employers

explaining our program and what students could offer the company through an internship. Many internships were completed without any pay for the students. However, in the early 1990s, we had a close relationship with IBM in Research Triangle Park, North Carolina. During that decade, we placed approximately fifteen students there for internships. Many of them were offered full-time jobs after graduation. Through Society for Technical Communication (STC) networks, many other companies opened their doors to Cedarville interns. We had several go to Dell in Austin, Texas. Over the years, companies of all sizes have hired Cedarville students as interns.

One student's internship in 2008 took him all the way to Costa Rica where he served with the U.S. Embassy:

*At first, I thought the offer was based on my past overseas experience, or on my knowledge of Spanish, or maybe even on my interest in working in government one day. But none of these reasons proved true. The State Department chose me for the internship simply because of my technical communication major. Basically, the Embassy was very interested in using my language, design, and wordsmith skills to serve the Consular section. My tasks varied, but while in Costa Rica I wrote messages, news releases and updates to be sent out to the local American community. I also worked with U.S. citizens in prison in San José and wrote a small manual outlining the rights of Americans in prison and explaining the steps they need to take to be released or extradited to the U.S. Adam Evans, 2009 graduate*

Another student interned at Yellow Springs Instruments (YSI):

*I worked with the EcoMapper, a cutting-edge, six-foot robotic submarine painted bright yellow. Equipped with state-of-the-art technology, the EcoMapper collects data on water quality and creates extremely high-resolution maps of bodies of water that government and environmental agencies use for research. My assignment meant I had to become an expert on the EcoMapper and then transfer that knowledge to a user manual. The project was overwhelming, to say the least, especially given the 10-week deadline to complete the manual in time to ship an EcoMapper to the first customer. Kaleb Eldridge, 2009 graduate.*

The supervisor of his internship wrote on his final evaluation,

*YSI has realized the value of hiring a trained technical communicator through the work of Kaleb Eldridge. We look forward to future connections with the Cedarville TPC program. Rob Ellison, YSI*

YSI hired Kaleb after his graduation.

Students are also very involved in the campus chapter of the Society for Technical Communication. Our student chapter was chartered in 1988, and since that year we have won several international chapter awards, including two Chapter of Excellence awards, two Newsletter awards, and two Pacesetter awards. Since 1992, we have had twenty students inducted into Sigma Tau Chi, STC's student honorary society, and two TPC students have received the International Distinguished Service Award from STC. Students tend to become active in professional STC chapters after graduation, even serving as president for their local chapters.

## **Faculty**

The following faculty teach in the TPC program:

- Sandi Harner, Professor, Founder, and Director of the program.
- Don Humphreys, Associate Professor of Technical Communication
- Melissa Faulkner, Assistant Professor of English

As Director of the program, it has been my passion to keep the TPC program relevant. That doesn't mean that industry needs or fads have been the impetus for program changes, but it does mean that as the profession has broadened over the years, I have tried to keep the curriculum focused in ways that would prepare graduates to be successful in a variety of technical and professional communication environments. My research has primarily centered on curriculum development. I also have a keen interest in the technical marketing communication field, and in 1997, I received the first STC Faculty Internship grant, a monetary incentive for teachers of technical communication to step out into the workforce and experience first-hand much of what we teach in the classroom. I welcomed that opportunity and worked all summer for MYCOM, Inc., a technical marketing communication firm, located in Cincinnati, Ohio. In 2002, I co-authored *Technical Marketing Communication*, published by Allyn & Bacon in their Technical Communication Series.

Don Humphreys is associate dean for the Center for Teaching and Learning (CTL) and associate professor of Technical Communication. Humphreys is a 1989 graduate of the TPC program here at CU. He earned an MS in Technical Communication from Southern Polytechnic University and an MA from The Ohio State University in Instructional Design and Technology. He has spent over fifteen years in the corporate world as an instructional designer, usability consultant, and technical writer. In addition to his responsibilities in the CTL and the TPC program, Don continues his consulting work as a Senior Instructional Designer with S4NetQuest, an eLearning firm based in Columbus, Ohio. He teaches Instructional Design I and Instructional Design II in the TPC program.

Melissa Faulkner, an Assistant Professor of English, joined CU's Language and Literature Department in 2007, after earning her PhD in Composition and Rhetoric from Miami University of Ohio. Faulkner also has a certificate in technical and professional communication from Wright State University. She teaches Basic English, Composition, Advanced Composition, and Introduction to Literature. Dr. Faulkner's areas of specialty include classical rhetoric, working-class rhetoric, research methods, and Writing-Across-the-Curriculum. She teaches the Design of Manuals class, Professional Portfolio I and II, and our new course, Visual Rhetoric.

Faculty for the TPC program is an area where we have always struggled. Although the program has always been strongly supported by the chair and the faculty in the Language and Literature Department, getting additional full-time faculty has been a challenge. In addition to the three faculty listed above, we currently hire two adjuncts.

## **Facilities**

When the program began in 1985, I did not even have a computer in my office. But then, neither did any of the faculty. By 1987, Cedarville College boasted one computer lab with approximately 40 computers. Students and faculty waited their turn for use of the computers. In 1988, two computer classrooms were added to the campus, and I was privileged to have my TPC classes scheduled in those classrooms. In those days, I remember that I had to teach students how to turn on the computer and how to handle the 5.5 inch floppy disks. By 1993, our campus became an IBM Showcase Account with the addition of several computer classrooms and a computer and printer in every dorm room. During that decade, I often had to go to several different buildings each day for the TPC classes scheduled in computer classrooms.

In 2002, CU opened a new student union that housed a new cafeteria. The old cafeteria building was completely gutted and retrofitted with a strong emphasis in technology. In fact, the building was named Tyler Digital Communication Center. In this newly designed building, the TPC program received a dedicated classroom and office space adjoining it. The classroom is equipped with 24 computers that line three walls of the room with a fully equipped tech cart in the front. A small conference table with high-back chairs sits in the back of the room and accommodates many small group meetings. Four rows of modular tables and chairs are in the middle of the room. They can be configured in various ways to accommodate lecture or small group activities. We have a large color printer in that room that is used only by TPC students to print final pieces for their portfolios.

## **Program Objectives**

The TPC program includes the following objectives:

- Students will ethically gather, access, and use primary and secondary information demonstrating a biblical worldview.
- Students will demonstrate the ability to write clearly, concisely, cohesively, and coherently.
- Students will analyze audiences or users, their needs and constraints.
- Students will use technology in research, development, and production of both print and digital media.
- Students will create documents appropriate for the needs and constraints of targeted audiences or users.
- Students will demonstrate the ability to critically read and apply communication theory.
- Students will exhibit preparedness for professional life through appropriate social interactions and portfolio development.

Our entire university is heavily involved in assessment; consequently, we have done extensive work in preparing an assessment process that is being implemented for the first time in Fall 2009. (See the Appendix for one of our assessment documents.)

## **Distinctive Features of the Program**

From the inception of this program as a minor through its evolution to a major, the Language and Literature Department has been fully supportive. In the early days, when it was a minor consisting of nineteen quarter hours, students were actually English majors with a professional writing minor. During those days, the then-Chair Ray Bartholomew, who was a Shakespeare scholar, called me into his office and asked me the following question: "Isn't there a class that your students could take that would be more meaningful to them than my Shakespeare class?" He assured me that I would not offend him if I dropped the Shakespeare requirement and proposed a new course for professional writing students. Design of Manuals was the result of that conversation.

That support led to easy acceptance of all new course proposals as we dropped one literature requirement after another to make room for the new TPC courses. Now TPC majors take the same amount of literature as all students at the University to satisfy general education requirements.

A balance of theory and practice has always been one of the distinctive features of our program. TPC students are exposed to rhetorical theory in the first

course in the program, and that theory provides the basis for the remainder of the curriculum. Adult learning theory is the focus of both the Instructional Design courses. Theory is the underpinning of everything they learn throughout the required courses. In addition to knowing how to be an effective technical communicator, we emphasize the necessity of knowing why technical communicators make the choices they make.

Each student takes Visual Rhetoric during the junior year. That course is a blend of learning rhetorical theory of communicating visually and analyzing visuals as they apply the theory. During the spring of the senior year, students take Special Topics, the capstone class. This course introduces students to some central works in the TPC field, familiarizes them with some prominent theorists and notable theoretical approaches. Currently, we use *Central Works in Technical Communication* edited by Johndan Johnson-Eilola and Stuart Selber.

During the semester, students are assigned to be the discussion facilitator several times. Everyone is required to read the assigned material.

As discussion facilitators, students are responsible for the following tasks:

- By noon two days prior to the class in which students are scheduled to facilitate, the facilitator must send by email to all classmates and the instructor the discussion questions for the assigned reading.
- Before the discussion starts, the facilitator is to share biographical information about the author(s) of the day.
- Facilitators start and keep the discussion on task, taking charge and fielding questions as the discussion progresses. Facilitators are not to allow any one person or persons to dominate the conversation and are to make sure they acknowledge all participants.
- Facilitators should move through discussion material at an appropriate pace. This movement doesn't mean that the entire list of questions must be discussed because it is possible that some questions may take longer. Facilitator should not stifle a lively discussion, but should be aware when the class needs to move on to another question.
- The questions should guide the discussion in such a way as to involve significant issues that require students to find connections and develop threads from previous readings.
- The facilitators' grades are based on the quality of the questions as well as the skill of facilitation. The grades are reduced if the questions are not delivered on time.

- The facilitator should use creative ways to augment the discussion (i.e., real-life examples, illustrations, previous class discussions).

As class participants, students are responsible for the following tasks:

- Carefully read each assignment.
- Bring to each class written notes in answer to the questions. Grades will be reduced if students do not have written answers to the questions.
- Participation grades are based on the quality of the participation, the significance of comments, and the quality of the notes brought to class. Everyone is expected to participate equally.

In addition, students must choose a rhetorical theory and complete an annotated bibliography. Then they are to write a paper that involves a literature review, an explication of the theory, and an application of the theory to the work of technical communicators. At the end of the semester, students are responsible to give a professional presentation of their findings to all TPC students and faculty.

In addition to theory, our curriculum emphasizes hands-on practice of the skills needed to be successful in the profession. Students experience client-based assignments beginning with the introductory technical communication course and continuing throughout the entire curriculum. In Technical Marketing Communication, students plan a marketing strategy for a nonprofit organization and execute the plan with several marketing pieces. In Developing Online Information, students work with individual clients who need websites. In Instructional Design I, students develop a stand-up, face-to-face training program for faculty and staff, a project which culminates in delivery of the training. In Instructional Design II, students plan and deliver an e-learning course to a client. In Design of Manuals, students work with a client for a group project to deliver a user manual.

In addition to coursework, students are expected to participate in client-service projects. These projects serve two purposes: to provide portfolio pieces for individual students and to earn money for our annual STC trip in the spring. We advertise these projects by email to all faculty and staff, describing the type of services we provide. As projects come in, students volunteer to take them on. They initiate contact with the client, gather all information, and complete the project. The client fills out an evaluation of the experience and sends a donation to our STC fund. We have created PowerPoint slides for faculty, department brochures, flyers, posters, and websites. In addition, students have edited many documents. The donated funds allow us to take a spring

trip. We choose a destination city and then network to find companies that hire technical communicators and are willing to host a tour of their company. The technical communicators usually spend time with the students discussing their work.

Students collect their work, both from the classroom and from the client-service projects, in a professional portfolio. They learn how to create this portfolio in both Professional Portfolio courses—as a sophomore and again in the senior year. The Industry Advisory Board for the TPC program interacts with students three times a year. First, during the Portfolio course, students have to choose a job announcement for which they are comfortable applying. They send a copy of the job announcement, a resume, and a cover letter to an assigned member of our Industry Advisory Board. The board member and the student communicate and set a date and time for a mock phone interview conducted by the board member. Two weeks later, the Board comes on campus and spends the afternoon conducting mock face-to-face, follow-up interviews with students. Later in the year, board members return to conduct a portfolio review and to evaluate students based on their portfolios and ability to present that work to the board members.

A final distinctive feature the CU's TPC program is our attempt at globalization. We have a long way to go before we can say that our program includes a global emphasis. However, Cedarville University is committed to giving students the opportunity to travel abroad. Every semester students have the opportunity to study in England, Ireland, Spain, or many other countries. During the summers, several instructors teach one of their courses in another country. Cedarville students can register for those courses to fulfill general education requirements or one of their major requirements. In May 2009, TPC students were able to take Technical Marketing Communication in Marburg, Germany. At the end of our term (four weeks), students completed a group project—a 52-page booklet entitled *The American Student's Guide to Marburg*. In May 2010, *Designing Technical Reports* will be taught in Athens, Greece.

## **Concluding Remarks**

When I look back at that department meeting in 1984, I am amazed at what has resulted from a seemingly innocuous question about making TPC majors more marketable. We have seen changes in curriculum, faculty, facilities, and even the kinds of students we attract. But the mission has been consistent: to graduate students who can solve communication problems in a variety of workplace situations and who can become change agents in leadership positions. Together, the faculty and students have learned a great deal about what it means to be an effective technical communicator in today's world.

## Appendix

### Example TPC Assessment Document

1. Students will ethically gather, access, and use primary and secondary information demonstrating a biblical worldview.
2. Students will demonstrate the ability to write clearly, concisely, cohesively, and coherently.
3. Students will analyze audiences or users, their needs and constraints.
4. Students will use technology in research, development, and production of both print and digital media.
5. Students will create documents appropriate for the needs and constraints of targeted audiences or users.
6. Students will demonstrate the ability to critically read and apply communication theory.
7. Students will exhibit preparedness for professional life through appropriate social interactions and portfolio development.

#### ***Objective 1 will be assessed in the following ways:***

- In Corporate Culture, students will write a final paper on their theology of work and how it relates to the profession of technical communication.
- In Visual Rhetoric, students will demonstrate ethical choices in using and designing visual communication.
- In Technical Communication and Designing Technical Reports, students will analyze incidents such as Three Mile Island, Challenger, and Enron to determine the ethical consequences of organizational communication.

#### ***Objective 2 will be assessed in the following ways:***

- In Style, students will demonstrate through pre and post tests their mastery of writing clearly, concisely, cohesively, and coherently.
- In Designing Technical Reports, Instructional Design, and Special Topics, students will demonstrate through final papers their ability to write clearly, concisely, cohesively, and coherently.

#### ***Objective 3 will be assessed in the following ways:***

- In Technical Communication, Design of Manuals, Instructional Design I and II, and Designing Information for the Web I and II,

students will demonstrate the ability to analyze the needs and constraints of their intended audience in specific projects.

- In Technical Marketing Communication, students will demonstrate their ability to complete a needs analysis for an intended audience.

**Objective 4 will be assessed in the following ways:**

- In Designing Information for the Web, students will demonstrate their ability to use technology as they develop usable websites for potential clients.
- In Production Tools, students will learn technology that is used in their coursework, as well as in the workplace. More importantly, students will learn how to teach themselves software packages so that they can continue lifelong learning in that field.
- In Design of Manuals, Technical Marketing Communication, and Instructional Design I and II, students will use technology to produce various projects for intended audiences.

**Objective 5 will be assessed in the following ways:**

- In Design of Manuals, Instructional Design I and II, and Technical Marketing Communication, students will demonstrate the ability to shape a document that will meet the needs and constraints of their targeted audience.

**Objective 6 will be assessed in the following ways:**

- In Visual Rhetoric, students will learn to read theory and apply it to their work.
- In Special Topics, students will demonstrate the ability to read theory, facilitate discussion about that theory, and apply it to specific communication tasks.

**Objective 7 will be assessed in the following ways:**

- In Portfolio I and II, students will prepare a professional portfolio that effectively demonstrates their experience and abilities in the profession of technical communication.

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**Author Information**

Sandi Harner is Senior Professor in the English Department at Cedarville University. She joined the faculty in 1981. In 1985, she founded the technical and professional communication major and continues to direct the program. She co-authored a book entitled *Technical Marketing Communication*, which was published by Allyn & Bacon/Longman

in 2002. Sandi served on the Society for Technical Communication (STC) Board of Directors as Assistant to the President for Academic and Research Programs from 1998 until 2006. Currently she serves on the Governance Committee of the STC Technical Communication Body of Knowledge Team, providing Strategic Oversight to the area of education. She was the recipient of the Jay R. Gould Award for Excellence in Teaching Technical Communication in 1996. In 2001, she was named STC Fellow.