MAKING CONNECTIONS IN SECONDARY EDUCATION

Document Exchange between Technical Writing Classes and High School English Classes

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CHAPTER FOCUS

Audience analysis is an important component of any writing course, but it is crucial to technical writing instruction. As defined by Lisa Ede (1984) in "Audience: An Introduction to Research," audience analysis involves "methods designed to enable speakers and writers to draw inferences about the experiences, beliefs, and attitudes of an audience" (140). Through the efforts of composition programs and the growth of the writing-across-the-curriculum movement, students have many opportunities to develop their writing skills in a variety of contexts. The majority of these tasks are academic in nature, and audience analysis, if performed, consists of assessing what knowledge the instructor wants students to demonstrate through the writing task, such as research papers and essay exam responses, and of making accommodations for that instructor's particular stylistic or format requirements. In contrast, typical assignments in technical writing courses-correspondence, instructions, proposals, and so forth-require students to envision specific audiences outside the classroom for whom to write and to consider the contexts in which these documents will be read.

Making the transition from academic to nonacademic audiences can be difficult for technical writing students, especially when the immediate document cycle is essentially the same as for other academic writing tasks: the student completes a document and submits it to the instructor to be evaluated for a grade. To increase focus on audience analysis, some features of nonacademic writing can be simulated in the classroom to give students a more authentic feel for nonacademic writing genres and

16

processes; for example, peer critique groups can serve as editing panels or user-testing groups, and instructors can exchange documents between classes or with each other's classes to provide a separate group of readers. However, more instructors are now designing assignments in which students, either individually or in groups, must work outside the classroom with an on-campus or off-campus organization to create documentation. Some instructors provide guidance for these projects by soliciting organizations themselves, while others leave this responsibility to the students; in either case, nonprofit organizations tend to be productive choices because (a) assistance from students is welcome community service and (b) students are less likely to become involved in corporate politics during what is in essence still a relatively short-term project being completed as a component of an academic course. In any case, by taking writing out of the classroom and bringing it into the community, students gain authentic audiences, experience document cycles firsthand, and learn the importance of community responsibility.

However, some instructors and administrators are beginning to express concerns regarding safety and liability when requiring students to travel off campus for class assignments. Students are usually required to complete liability forms for off-campus field trips, conference trips, and so forth, but what are students' rights and schools' responsibilities regarding required off-campus study? Do students have the right to refuse to travel off campus to complete an assignment if they feel uncomfortable with their organizational representatives or their peer group, or is this position considered another component of adjusting to writing in the "real world"?

To address these concerns while still providing a service for an offcampus audience, we have organized document exchanges between Guzy's university-level technical writing classes and Sullivan's high school senior English classes. We began our exchange program after discussing the formal introduction of audience analysis into the curriculum in Sullivan's department and comparing that with the importance of audience in Guzy's technical writing assignments. Exchange cycles are relatively brief with students in one class sending documents either consisting solely of or including correspondence and the students in the other class responding to those documents; logistically, we have kept these brief so as not to interfere with other assignments required by the respective curricula.

We feel that our exchange is an innovative approach to teaching technical and professional writing, in several ways. First, this approach is innovative to the high school teacher because it gives the students a real audience, not a "teacher" audience that lacks the realism of an authentic audience. In this light, high school students stand to be greatly influenced in that their work will be authenticated; college students will benefit from this authentication as well, but will also gain experience in targeting their technical knowledge for a more general knowledge base. Thus, when performing audience analysis, students at each end of the exchange must consider the age and relevant academic experience of their exchange partners; to simulate a more global workplace, they also learn about another community in a different geographical and socioeconomic part of the country. Correspondence between exchange partners usually includes discussion of academic experiences and professional concerns, so students have the added opportunity for self-reflection and assistance in decision making as graduation nears for both groups. In doing so, students still write for an off-campus audience but from the relative safety of classrooms. Finally, the documents produced for the exchange require extreme diligence because, once sent, they are truly gone without students being able to intercept them to make corrections. This process is important for students because they rely so much on the document cycle of teachers receiving papers, correcting them, and handing them back for revision after revision.

PEDAGOGICAL/THEORETICAL FRAMEWORK

Research on audience analysis is plentiful in rhetoric and composition and has readily been adapted to theory and pedagogy in technical communication. For example, Coney (1997) reviews work on audience by a variety of groups, such as reader response theorists, cognitive psychologists, and ethnographers and concludes that "if any generalization is possible at this point, it is that for technical communicators, nothing matters *more* than audience" (5). For our exchange, we are working with interpretations and applications of this research at both the secondary and postsecondary education levels.

One of the foundations of contemporary research in audience analysis is the germinal work of Ede and Lunsford (1984), and, for our exchanges, their distinction between "audience addressed" and "audience invoked" is particularly important. Introducing these terms, the authors note that "[t]he 'addressed' audience refers to those actual or real-life people who read a discourse, while the 'invoked' audience refers to the audience called up or imagined by the writer" (156). For most technical writing assignments, students are asked to address a specific audience, such as the users for a technical manual, but in most cases, they are never actually able to communicate directly with their intended readers, to solicit feedback for improving the design and usability of the document. In fact, unless the student is actively engaged in a writing assignment for an organization outside the classroom, the only audience truly "addressed," according to Ede and Lunsford's definition, is the instructor who reads and evaluates the assignment. Classmates are also directly addressed when students give oral presentations, but through peer critiquing they may be more secondary readers and editors than primary readers for assignment purposes. With the secondary setting, students call upon the invoked audience for most writing assignments. Then, after completion and grade assignment, students file the papers away without taking value of the critique because there was not a real audience; therefore it is not of real concern to them. The students translate a "fake" audience to a "fake" experience, thus not giving credence to the assignment and, in effect, wasting paper and time.

Addressing this conflict of audience and purpose further within technical communication, Redish (1997) applies basic concepts from cognitive psychology to technical communication pedagogy, identifying four factors that aid in audience analysis and interpretation of technical texts:

Many readers share experiences and, therefore, have similar schemas.

The text (or product) influences and constrains readers' interpretations.

Guidelines derived from empirical research can help technical communicators meet their readers' needs.

Techniques exist for getting feedback from audiences on draft materials. (73-74)

One of the most important problems technical writing students have with audience analysis is identified in Redish's first factor: students' schemas concerning writing are based in academic writing tasks for their instructors, and attempting to balance writing for the technical writing instructor with writing for an "addressed" audience can cause cognitive dissonance: "Students may develop schemas that tell them there is one truth in the classroom and another in the real world" (78). The secondary students regard the classroom experience as far removed from real world applications as well. Instructors need to help students adapt the schema of a "false" setting within the classroom to a "real-life" situation within the workplace environments. This situation can help students to bridge the gap between academia and the workplace, thus adding credibility to classroom instruction. Once we have established this reality, students can readily adapt the schema to match workplace goals, which, in turn, makes them more equipped for the ever changing workplace. Proposing ways in which instructors can help students change their interpretive schemas concerning technical communication, Redish charges instructors to actively engage students in learning while raising an important question about the conflicting schema:

Lecturing at students seldom results in real learning. But activity by itself is also not enough. The activity has to be situated in realistic contexts. . . . [But a]re the students getting mixed messages? Are they being told that they should write for a 'real audience' when they know that their product will be read only by an instructor who is not part of the real audience? (80)

By creating our document exchange, we have given students the opportunity to write to a "real," actively addressed audience. We still review the documents as instructors to monitor general content and quality of the material being exchanged (see the "Implications" section for potential conflicts with grading and openness between students in exchanges), but we are no longer the primary audience for the documents. We work from class rosters to match academic and professional interests as closely as possible, so students have names of people to whom they can specifically address correspondence.

Having an individual to whom to write begins the audience-analysis process, but it continues in a unique way when students must acknowledge that they are writing for people at different levels of academic development. As Ede and Lunsford (1984) state,

Even the conscious decision to accede to the expectations of a particular addressed audience may not always be carried out; unconscious psychological resistance, incomplete understanding, or inadequately developed ability may prevent the writer from following through with the decision—a reality confirmed by composition teachers with each new set of essays. (166–167)

The problems Ede and Lunsford identify are typical of problems students have during the exchange. First, psychological resistance, and rather conscious resistance at that, may come in the form of students not taking the assignment seriously because (a) the instructors are not the primary audience, (b) the assignment seems so different from the rest of the coursework, (c) the audience seems contrived and not one they would write to in their future school or work settings, and, (d) quite mundanely, the exchange may not figure prominently in their final grades. Therefore, we encourage them to include relevant personal information such as discussion of extracurricular activities and hobbies, as well as questions about what to do after graduation and what career paths to pursue. Incorporating such information can motivate students to be more active writers and thoughtful readers and responders; Allen (1989) argues that

motivation may make significant differences in the way readers read: the amount of time they are willing to invest in reading a document, their attitude toward it, the kinds of information they are most likely to garner from it, their expectations of it, and other factors that would require the technical writer to go far beyond the concerns of traditional audience analysis. (54)

Incomplete understanding and inadequately developed ability, however, are more pressing problems that may be identified, although not fully solved, only during the course of the exchange process. Students at both ends may have problems with their writing, particularly with grammar and mechanics; and adapting their writing style and content for their respective audiences can be challenging when crossing educational levels. This challenge is especially true for some college juniors and seniors who have naturally become heavily involved in their major coursework but who may not be easily able to explain what they do without using heavy doses of technical jargon and abstract concepts. As Allen attests, audience analysis depends on "the technical writer's understanding of what the audience can be expected to know, enabling the writer to determine where to add detail, descriptions, definitions, analogies, or other aids to understanding" (58).

To address this problem at the college level, we follow Redish's third suggestion for using empirical research to help writers meet readers' needs. Burnett's (1997) textbook *Technical Communication* includes a chapter on audience in which she identifies and describes several types of prospective audiences for technical writing and useful sections for younger audiences. The first section we discuss is Burnett's description of students:

- *Students,* from those in advanced high school courses to those majoring in technical subjects in college, have a particular interest in technical material. They read as part of their academic preparation or their cooperative work-study programs. They are interested in learning disciplinary knowledge and forming opinions to gain a broad background and eventually to become professionals in a specialized field. Subjects range from metal optics and metal fabricating to biomedical research and oceanography.
- *Familiarity*: often know generalizations in a field; typically need information that provides technical details as well as implications
- *Expectations:* information that will help them with *assessing, learning, learning to do,* and *doing;* usually interested in theory as well as practice
- *Typical education:* may have already completed high school or undergraduate programs; may have specialized training from summer or part-time jobs, internships, or co-op programs. (68)

However, for some of the college-level technical writers, this discussion does not emphasize enough the importance of "translating" information about their majors and research interests to their correspondents; therefore, we also review Burnett's description of children:

- *Children* are increasingly reading technical documents adapted to their level. Many of them enthusiastically read science books and have their own subscriptions to children's science magazines. They also read the technical documents that come with their computers, models, and video games.
- *Familiarity:* may know generalizations in a field; want information that explains how and why things happen; need special consideration for limited formal concepts and vocabulary
- *Expectations:* information that will help them with *learning, learning to do,* and *doing;* widely varied interests, sometimes wanting background information and at other times wanting help completing a task
- *Typical education:* may have completed elementary, middle, or junior high school; may have specialized knowledge from hobbies and activities. (69)

In addition to discussing the importance of editing jargon and defining field-specific knowledge in more detail, we also expanded our audience analysis beyond age and educational level to include geographic and socioeconomic differences that might influence the students' writing and their readers' perceptions. Allen (1989) argues that technical writers need to consider effects of geographic changes and social and cultural differences (62); with advances in electronic communication and the global economy, students need to enter their future workplaces ready to acknowledge and address differences in communication styles of people outside their local discourse communities. As the audience analysis allows students to learn about different areas of the country-Midwest and Southwest, industrial and agrarian, rural and suburbanstudents also have the added benefit of observing the similarities between their immediate communities. In an intrinsic yet reassuring way, discovering similarities in academic and professional interest concerns with someone halfway across the country not only demonstrates to students that they are not alone in their postgraduation concerns but also opens students' minds to academic and professional opportunities outside their hometowns and states. Students at the secondary level typically are closed to the reality of what lies ahead of them in the real world and often hide behind the familiar walls of the high school. To help transition them to the real world, this exchange shows them a life beyond the security of home and helps to condition them to a larger world waiting for them. By giving them a taste of college and what is expected there, the exchange helps to cushion the blow by giving them a safe taste without the fear of failure. Also, for many of these students, life beyond their city limits may seem impossible and overwhelming, but the exchange opens the world to them, allowing a greater sense of reality to begin to seep into their consciousness.

DESCRIPTION AND ELABORATION

On one end of the document exchange is Sullivan's annual spring senior composition class at Granite City High School in Granite City, Illinois. Granite City is a suburb of St. Louis, Missouri, with a population of approximately thirty-five thousand. Its residents' economic status tends to be working class to middle class with one prominent employer being Granite City Steel. The high school population is approximately 2,200 students.

On the other end of our first two exchanges was Guzy's annual spring advanced technical and professional communication class at New Mexico State University (NMSU), located in Las Cruces, New Mexico, about forty-five minutes from El Paso, Texas, and the United States–Mexico border. Las Cruces has an approximate population of seventy thousand residents, and the town's economic status shows a divide between more affluent employees of the university and local aerospace and military employers (NASA, White Sands Missile Range) and the area's farmers, ranchers, and migrant workers. In fact, in 1994, Doña Ana county was the fourth poorest county in the United States. Many of NMSU's fifteen thousand students come from Las Cruces and from smaller rural towns throughout New Mexico. The advanced technical and professional communication course is required for juniors and seniors in NMSU's Wildlife Science and Chemical Engineering programs, so these majors are represented prominently in the exchanges; other typical majors enrolled include premed, nursing, and other natural and applied science fields.

To begin each exchange, Sullivan and Guzy assisted students with audience analysis and preparation of documents through classroom exercises (see appendix for exchange schedule). First, reviewing chamber of commerce-style materials about their respective cities and schools led to class discussions about cultural and socioeconomic differences between the areas and the stereotypes students might have held about their audience. For example, NMSU students thought that people "back East" did not know that New Mexico was part of the United States (although sometimes this is actually true). Then, the students studied the conventions of professional correspondence to write letters in which they discussed academic, professional, and personal interests. In some cases, students attached additional documents for their correspondents' review, and these documents will be addressed in the respective exchange narratives discussed later. To prepare students for the exchange, Sullivan led her students in a discussion about postsecondary options available to them. This exchange created an atmosphere of acceptance of the papers, much like introducing a new baby home to an older sibling and made students aware that the papers arriving would not be polished papers from teachers and professionals, but from peers with a little more education. This understanding helped to establish a bond early on, so students were more receptive to the idea of the exchange.

Spring 1997

The first document exchange began at NMSU. In one thread of assignments, Guzy required students to select topics from their majors and take these through several genres, beginning with a three-page position paper and annotated bibliography on an issue and ending with a lengthier proposal and oral presentation. For the exchange, Guzy requested that students revise their position papers for their new readers; the students' main challenge was to perform enough revision of technical concepts and terms that the high school readers could understand the content of the documents. For example, one student writing about New Mexico's Waste Isolation Pilot Project (WIPP) added description to help define the problem he was addressing:

Original Position Paper material: At the present time in the United States of America there does not exist a central repository for the long term storage of high level nuclear waste. Most of the high level nuclear waste that is generated by both the civilian and military sectors is stored on site, in temporary storage facilities. This condition has lasted for more than fifty years now, with most of the temporary storage sites now filled to capacity and beyond. High level nuclear waste can be separated into two different types: high level waste and transuranic waste. High level waste consists of the spent fuel rods from civilian and military reactors, reprocessed fuel rods and radioactive material recovered from obsolete nuclear weapons. Transuranic waste includes compounds such as plutonium, by-products from nuclear weapons production and certain laboratory grade materials.

Revision addition: The problem of nuclear waste disposal in this country can be compared to local trash collection. For instance, consider the trash collection in your own hometown. Every week the city comes and picks up your trash and takes it to a landfill or other facility for proper disposal. Now consider what would happen if the city did not come and pick up this trash. You would be forced to dispose of it yourself or store it in your house. Eventually, you would run out of living space and the threat of disease would be such that you could no longer live in that location anymore. This scenario is similar to what is happening with the nuclear waste in this country.

Guzy's class had also covered correspondence and resumes in an earlier unit, and Sullivan's class was going to begin that unit shortly, so Guzy's students included their resumes and wrote brief cover letters, which discussed not only their position paper topics but also the academic and professional choices reflected on their resumes. For instance, the student previously mentioned included the following text in his letter:

The following report is a discussion of the problem of nuclear waste disposal in this country. This sounds like a very difficult and boring subject, but if one looks at the information with an open mind, the subject is not that difficult or boring. I hope that you find this report useful and informative.

A little background on the author of this report. I am a senior studying Chemical Engineering at New Mexico State University. I will be graduating this semester and am looking forward to starting my career. I am thirty years old, yes that's right, I am an old man. Before coming back to school, I spent ten years in the United States Navy. It was in the Navy I learned all about Nuclear waste. I am in fact still in the Navy, as a Lieutenant Commander in the reserves. Upon graduation, I am going to be going to work for the Intel Corporation as a Process Engineer working on developing new microprocessors for personal computers.

All of the documents were then mailed to Granite City High School. Sullivan's students were then able to use the resumes and letters as design templates for assignments. For example, the student assigned to read the WIPP paper wrote this letter:

I am writing in response to your letter and report. Although nuclear waste disposal is not my field of expertise, I found your report to be rather informational and interesting. I greatly appreciate the time and effort that was put into your project.

A little about me, as a person and student. I am eighteen years of age and am currently a senior at Granite City Senior High School. I write for the school paper and have participated in several school sports. I will be graduating this June and look forward to attending Illinois College. I currently have a B average and hope to carry that with me through college. I plan to study medicine at IC and will, with the permission of grades and money, attend Med. School shortly after graduating. The choice of field is uncertain at this point however, but I feel that I have several years to choose one.

I would like to wish you luck with your future as a Process Engineer and congratulate you on a report well written!

Several of the position papers, however, proved more troublesome because some of the technical writing students had given less attention to revising their documents than others had. For example, this position paper material was not revised at all from the original document:

By using recycled PET [polyethylene terephthalate], not only does it reduce production cost compared to newly manufactured PET, but the growing environmental problem of long term disposal of plastic waste is also reduced. In order for the PET to be usable it has to be broken down into a form in which the cement and it can mix. The plastic must be transformed into a liquid but still maintain the basic original chemical structure. The plastic contains long rigid chains of molecules that make up the solid. The composition has to be altered in order to make a liquid; such a process is called depolymerization. With PET this is done by combining the PET with glycols of either ethyl propylene or neopental. A glycol is a chemical compound that contains two oxygen-hydrogen groups on the molecule. With sufficient heating the long chains of the polymer are broken down into their basic monomer structures. A monomer is the ionically stable building block of a polymer. The monomers are then reacted with anhydrides to form unsaturated polyester resins. Unsaturated polyester resins are molecules that have carbon-carbon double bonds. This somewhat deactivates the polymerizing properties of the monomer. The depolymerized resin is usually very viscous and needs to be diluted with styrene. By diluting, the resin can be mixed easier and further cured to give a harder finish.

A few of Sullivan's students were able to use the information from the position papers for senior term papers, but overall, the response rate was fairly low: less than half of the technical writing students received handwritten reply letters.

In our review of this first exchange, we felt that the results were less successful than we had hoped. First, we had discussed the exchange before the beginning of our respective terms, but we did not decide upon what to include in the exchange in enough time to include it officially in our respective curricula. Therefore, students ended up working on exchange materials in addition to the regular course assignments, which may have contributed to a lack of focus in these materials. Also, without enough substantial revision, the position papers were relatively confusing and intimidating to the high school students. As we had begun the exchange relatively late in the term, right after March midterms, the time needed on both ends for writing, revising, and mailing through regular U.S. postal mail at such relatively short notice for the students affected the quality of material on both ends.

Spring 1998

For the second exchange, we began in early February, shortly after the high school's new semester had begun. Sullivan now had personal email, so she requested and received a copy of Guzy's class roster with respective names, majors, and grade levels. This exchange then began with Sullivan's students writing typed or word-processed letters personally addressed to Guzy's students. Letters included descriptions of academic and social activities and questions about jobs, school, and local culture. For example:

Hello, my name is ——. I live in Granite City, IL and I am currently a senior at Granite City High School. I play varsity for the high school soccer team and I also play select soccer.

I plan on attending Lewis and Clark Community College then moving on somewhere better. My grades aren't very good, but I'm a good athlete. Hopefully I'll do better than I would in a bigger school. I'm kind of nervous about going to college and starting out at a close place would help.

The best thing about college is going to be that I'll get to move out. My parents will probably kick me out. My dad is a lawyer and my mom is a nurse. I don't have any brothers or sisters but I have a dog.

Well, that's about all I can say about myself, I hope you'll write me back and tell me about yourself.

The exchange was also now officially on Guzy's technical writing syllabus, so when she emailed the class list, she was able to discuss with her class in more detail how the exchange would proceed after receiving these letters.

On the technical writing end of the exchange, the documents students include were modified slightly. First, Guzy's students still included their resumes and wrote letters to the high school students to practice the correspondence format, but now they were able to address specific students, not only a specific audience, both in writing and responses to documents, answering students' questions and expressing encouragement about respective goals. For example, the student who received the letter previously mentioned responded as follows:

Thank you for writing to me: it was great to hear from you. I don't follow soccer too much nowadays, but I used to watch soccer games all the time when I lived in England. My favorite English team was Liverpool. What is select soccer, anyway? I really enjoy football, and I have been a long-time fan of the Green Bay Packers. I'm glad they're doing well because they used to be stuck in a major rut.

I am studying anthropology at NMSU. I'm technically a senior, but I won't be graduating for another year. Once I'm finished with my degree, I want to get a license to teach math in the public schools. I know that math and anthropology don't seem to have much in common, but I really enjoy what I'm studying, even if I won't use it later in life. I also take the occasional math class on the side.

The anthropology department is really nice here. Many colleges require you to declare some kind of specialty or emphasis within one of the subdivisions of anthro. (The components of anthro are explained on the one-sheet.) However, NMSU allows me to dabble in whatever areas I choose. I am currently interested in archaeology and linguistics.

Are you still planning on starting at Lewis and Clark? It sounds like a great idea to me. Being close to home can make things a lot easier. My family is only a few hours north of Las Cruces, which is pretty close by Southwest standards.

There's something else that can make college easier: a really lousy summer job. I'm not talking about your everyday lousy summer job (like flipping burgers): you need to find something beyond bad. I have personally sunk as low as working the graveyard shift at a truck stop. Once you have wasted three months of your life in a job that most of your friends wouldn't touch, your college classes will seem like a breeze.

I don't have much else to say about myself. Nothing that's interesting, anyway: I spend most of my time working at NMSU's Math Learning Center and private tutoring anyone willing to pay me well. I do have a cat, though. I like dogs, but I can't truly respect any animal that can be trained to come on command. Cats are more free-spirited (i.e. spastic and cool).

I'll wrap this up now. Enjoy my resume and one-sheet. Try to use them for purposes of good, not evil (just kidding).

Second, this exchange included major changes in material; instead of revising their position papers, Guzy's students developed their skills in graphic design and visual rhetoric by creating informational one-sheets about their topics. The challenge this time was to narrow their information to the most important concepts, adjusting them to the high school audience and presenting them in an appropriate, visually interesting way. For example, the student who wrote the response letter previously mentioned produced the following one-sheet (see Fig. 1, opposite):

In our review of this second exchange, we found the process was a more successful approach for thorough audience analysis. First, the tasks we had chosen were much better suited for audience needs, and students had much better responses. Second, we allowed more time for discussion, drafting, and revising of the documents, so students could

ANTHROPOLOGY

ANTHROPOLOGY IS OFTEN DEFINED AS THE STUDY OF HUMANS IN ALL PLACES AND TIMES. ANTHROPOLOGISTS TRY TO DISCOVER/UN-DERSTAND THE "ESSENCE" OF BEING HUMAN. ANTHROPOLOGY IS TRA-DITIONALLY SPLIT INTO FOUR CATEGORIES:



Figure 1.

give more attention to their audience and their tasks. In addition, we had both seen problems with grammatical and mechanical errors during that term and decided not to make students edit these errors before sending their documents. Instead, we encouraged students to use the materials they received as editing exercises, providing an opportunity to move away from textbook exercises and brief samples to whole, "real world" samples.

IMPLICATIONS AND NEW DIRECTIONS

Throughout the exchanges, we have discussed several concerns regarding students' participation and responses to this exercise. One concern is whether we achieved true authenticity of audience analysis and response in an exercise with a secondary, although important, audience of the instructor. We have debated about whether to grade the exercise, which is an explicit acknowledgment of our participation in what ideally should be a document cycle between the students as writers and audience members. If we do grade, are we somehow influencing or "contaminating" the audience? However, without the specter of the grade looming in the background, will students take the assignment seriously and put their best efforts into writing for and responding to their audience? In actuality, we were pleasantly surprised at the growing level of enthusiasm we generally found as the exchanges progressed. Even students initially resistant to the exchange became more involved in and attentive to their writing and responses. The nature of the correspondence created almost an elementary school "pen pal" atmosphere of excitement—"Did we get anything back yet?!?"-that transcended the usual anxieties about what grades the documents would earn. In the end, we found that we did need to weigh the exchange in some fashion to ensure maximum participation, but we tended to count it more as participation than as a formal assignment grade.

As much as we want students to experience writing for these authentic audiences, recent events concerning student safety lead us to participate not necessarily as graders but as monitors of content and student conduct. In light of developments in the Columbine shooting tragedy in which a student received threatening electronic correspondence, we feel that monitoring content intended for other student readers is not censorship but a necessary measure to ensure students' academic and emotional well-being. Therefore, we discuss the appropriateness of material, especially personal information students may include in their correspondence, so as not to make their correspondents uncomfortable. If the other exchange documents, such as the informational onesheet, contain controversial or inflammatory subject matter, such as debates over animal testing or evolution versus creationism, we draw the writers' attention to using careful rhetorical strategies in presenting the material. If resumes or letters include email addresses, we caution students about corresponding with each other off campus outside the exchange cycle for reasons of personal security and privacy. In the end, we have to remember that many high school seniors are still legally underage correspondents; if something untoward were to happen, not only would the correspondents be liable, but we, as instructors, might also have to deal with repercussions from parents and our respective administrators.

For future exchanges, we would like to take the correspondence and documentation electronic. Electronic communication would facilitate exchange of documents by eliminating printing, copying, and mailing time and costs; it would also introduce immediacy of response, perhaps encouraging extended exchanges of different types of documents. For example, we could reintroduce the position paper component on the technical communication end and give the high school students a chance for extended critique and feedback to the college students, who, in turn, could provide more thorough revision for the high school audience. We would also be able to create totally new collaborative exercises between the classes, such as how to conduct electronic searches for research paper information and how to evaluate those sources for authenticity and authority, skills students at both levels need to develop further. For these exercises to happen in a monitored environment, classes on both ends need regular access to computer classrooms, which is not currently available but should be within the next few years.

Other disciplines can experiment with this form of authenticating by arranging similar exchanges. The secondary level science and history departments can make use of cooperative learning while strengthening writing abilities. Students on both ends of the exchange could share ideas, projects, and information, aiding in a development of additional knowledge. Because writing is a key to any profession, students could develop position papers for their history classes and experiment analysis in their science classes. Drawing upon their knowledge and being forced to look beyond the classroom for ideas, these students can expand their minds and force an authentic audience to evaluate their material. At the college level, students could take on the role of master and evaluate the material, responding to material in a more authoritative manner. They may also experience a new perspective on a concept or be reminded of an old idea, but with a fresh look. Both groups benefit from an authentic audience, knowing that the material is not just a grade but a leap of faith in revealing ideas to a stranger and in the sharing of information.

Overall, we feel that this exchange is worthwhile within the scheme of each course. First, each student gains valuable experience in audience analysis by writing for a real person rather than merely completing a textbook exercise. Many also work harder on style, grammar, and mechanics to impress their correspondents. Second, through the correspondence element, students are afforded an opportunity for self-reflection at an important turning point in their academic careers. Third, by corresponding with people from geographically and culturally disparate areas, not only might they see that these people have the same types of concerns about going to school or getting a job as they do, but they also might open their minds to consider a possible future outside their hometowns. Finally, instructors can maintain some control over this type of on-campus exercise in audience analysis, not to restrict participants but to provide consistent audiences and a safe environment in which to write and learn.

APPENDIX

EXCHANGE SCHEDULE

SPRING 1997

- 1. New Mexico State University: Technical writing students copy resumes, revise position papers, and write cover letters for high school readers.
- 2. Granite City Senior High School: Senior English students review materials and write response letters to technical writing students.

SPRING 1998

- 1. Teachers review class rosters to assign correspondent pairs.
- 2. Granite City Senior High School: Senior English students write introduction letters to assigned technical writing students.
- 3. New Mexico State University: Technical writing students respond to high school students with a letter and an informational one-sheet that presents their position paper material.