

March 2007

Drawing Back the Curtains: Finding new ways to assess and improve tutoring services in the writing center at WPI

Stephanie Legare
Worcester Polytechnic Institute

Follow this and additional works at: <https://digitalcommons.wpi.edu/mqp-all>

Repository Citation

Legare, S. (2007). *Drawing Back the Curtains: Finding new ways to assess and improve tutoring services in the writing center at WPI*. Retrieved from <https://digitalcommons.wpi.edu/mqp-all/459>

This Unrestricted is brought to you for free and open access by the Major Qualifying Projects at Digital WPI. It has been accepted for inclusion in Major Qualifying Projects (All Years) by an authorized administrator of Digital WPI. For more information, please contact digitalwpi@wpi.edu.

Drawing Back the Curtains:

Finding new ways to assess and improve tutoring services in the writing center at WPI

A Major Qualifying Project Report:

Submitted to the Faculty of

WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirements for the

Degree of Bachelor of Science

by

Stephanie LeGare

Submitted on: March 12, 2007

Approved:

Prof. Lorraine D. Higgins, PhD

1. writing center
2. assessment
3. student research

4. peer tutoring
5. revision process
- 6.

ABSTRACT

Conducting regular assessments helps writing centers discover new ways to improve tutoring services. This report recommends assessment techniques to help WPI's writing center improve its assessments. An example of an exploratory case study illustrates the value of in-depth assessment by providing several recommendations for improvement in the writing center at WPI, highlighting processes and interactions that occur within the writing center, and demonstrating how to improve communication between tutors, students and professors who use the center.

ACKNOWLEDGEMENTS

Special thanks to Professor Lorraine Higgins for the patience and sound advice she gave me throughout this MQP. Additional thanks go to the advisors and IQP students who participated in this exploratory case study, whose cooperation allowed me to research and develop a successful MQP.

TABLE OF CONTENTS

ABSTRACT.....	i
ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	ii
TABLE OF CONTENTS.....	iii
TABLE OF FIGURES.....	iv
TABLE OF TABLES.....	iv
INTRODUCTION: Recommendations for Writing Center Assessment at WPI.....	1
BACKGROUND AND LITERATURE REVIEW.....	3
The Purpose, Philosophies and History of Modern Writing Centers.....	3
The Writing Center at Worcester Polytechnic Institute.....	6
What Assessment Means for Writing Centers.....	7
Common Problems with Writing Center Assessment.....	9
Assessment Methodologies: What do we want to know about ourselves?.....	9
AN EXPLORATORY CASE STUDY: What influences student revision?.....	15
EXPLORATORY CASE STUDY METHODOLOGY.....	17
Subjects.....	18
Types of Data Collected.....	18
ANALYSIS OF DATA.....	22
Coding for Tutoring Transcripts.....	22
Coding for Advisor Comments.....	24
Coding of Student Revisions.....	25
Final Interview.....	26
RESULTS.....	26
Tutors and Advisors Focus on Different Aspects of Writing.....	27
Tutors and Advisors Have Different Commenting Styles.....	28
How writers are influenced by comments in a tutoring session - Draft 2.....	29
How writers revise in response to their advisors comments - Draft 3.....	31
DISCUSSION.....	34
Evidence shows that the WPI CCAC is successfully training tutors.....	34
The CCAC should teach tutors to give more affirming comments to writers.....	35
Professors should give more affirming comments to writers.....	37
Tutors and advisors should avoid overly directive comments.....	38
Two-way communication is essential for writers.....	40
WPI CCAC should implement journal partnerships between tutors and professors.....	42
WPI CCAC should implement more in-depth assessment techniques.....	43
CONCLUSION.....	46
BIBLIOGRAPHY.....	48
APPENDICES.....	50
Appendix A: Transcript of Tutor Meeting.....	50
Appendix B: Drafts of Student's Liaison Letters and Advisor Comments.....	53
First Draft of the Liaison Letter.....	53
Second Draft of the Liaison Letter after Tutoring Session.....	54
Advisor 1 Comments on Second Draft of the Liaison Letter.....	56
Advisor 2 Comments on Second Draft of the Liaison Letter.....	57
Third Draft of the Liaison Letter after Receiving Advisors' Comments.....	58
Final Draft of the Liaison Letter.....	60
Model Liaison Letter.....	61

TABLE OF FIGURES

Figure 1: Types of Data Collected.....	19
Figure 2: Microsoft Track Changes and Comment Boxes.....	21
Figure 3: Coding for Advisor Comments	25
Figure 4: Example of writers' comments.....	26
Figure 5: Example of Text and Advisor Comment.....	32
Figure 6: Students' revision because of advisor's comment	33
Figure 7: Relationship between the tutor, professor, and the student.....	40

TABLE OF TABLES

Table 1: Focus Areas for Writing Center Assessment.....	10
Table 2: Example of Tutoring Transcript Coding Scheme.....	22
Table 3: Aspects of Writing Identified in the Tutoring Transcripts	23
Table 4: Levels of Guidance	24
Table 5: Tally of the Aspects of Writing Discussed.....	27
Table 6: Tally of Commenting Style	29
Table 7: Aspects of Writing Revised in Draft 2	30
Table 8: Draft 2 - Who initiates revisions?.....	30
Table 9: Aspects of Writing Revised in Draft 2	31
Table 10: Draft 3 - Who initiates revisions?.....	31

INTRODUCTION: Recommendations for Writing Center Assessment at WPI

The goal of an assessment is to determine the value of an organization's efforts, to evaluate whether a program is meeting its goals and to explore and improve its services. Assessments allow a writing center to determine what works well for assisting writers and to highlight areas that many need improvement. Additionally, assessments can document the progress of a writing center, providing data for annual reports and information that justifies the program and its expenses.

The Center for Communication Across the Curriculum (CCAC) at Worcester Polytechnic Institute (WPI) conducts occasional surveys of its students as a means of assessment, but does not have a formalized or in-depth plan for assessment. Developing an assessment plan allows for yearly enrichment of the center and helps the staff and students to become more involved in the writing center's growth.

This project recommends effective assessment techniques for a university writing center, specifically, the CCAC at WPI. Included are a summary of commonly used assessment techniques for writing centers and a description of the types of data each technique yields. The techniques are appropriate for yearly reports and to determine what improvements and changes the writing center can make.

In addition to an exploration of these general assessment techniques, this report provides an in-depth example of one type of assessment, the exploratory case study. A case study can address one or more questions about the processes or interactions that occur in the writing center. The case study described in this report explores interactions between writers, advisors, and tutors in the writing center as student writers revise a text.

The writing center staff can use these studies as a valuable means to assess the services of the writing center and illuminate where the writing center can improve.

Future writing tutors in the CCAC may implement the techniques recommended in this report on a yearly basis, and are encouraged to conduct similar case studies as a means of continual feedback to determine if the writing center is serving the WPI community to its maximum potential.

BACKGROUND AND LITERATURE REVIEW

Writing centers across the country are open to all members of a school community; they have been established in elementary schools, high schools, universities, and local libraries. Although many writing centers share the same goals, the assessment techniques presented in this plan are for writing centers in a university setting, where undergraduate and graduate students are the primary clients.

The Purpose, Philosophies and History of Modern Writing Centers

Understanding the philosophies and ideals of the writing center is crucial because it creates the definition of “success” in terms of assessment. Neal Lerner (2005), an experienced writing center director at Massachusetts Institute of Technology, points out that “assessment should be tied to our values and theories, as well as to larger institutional goals as described in college or departmental strategic plans or mission statements” (p. 4). The results of an assessment tell the writing center that they have been successful if they are fulfilling their mission and promoting their institution’s goals. If a researcher does not complete assessment in terms of the writing center’s own goals, then it will be difficult to draw meaningful conclusions from the results (Thompson, 2006).

The dominant theory for modern writing center practice is described as a student-centered approach rather than a writing or text-based approach. Steven North (1984), a pioneer in the student-based writing center theory, is widely quoted from his article “The Idea of a Writing Center:” “*Our job [in the writing center] is to produce better writers, not better writing*” (p. 438). To produce better writers, tutoring focuses on the process of

writing and teaching a student to recognize errors in writing and revise his texts rather than the tutor proofreading a text or editing only.

The earliest writing centers did not always focus on improving the student as a writer. Instead, they served as “fix it shops” that catered to a text-based approach in writing, where mentors proofread, edited or assessed papers for accuracy in grammar, punctuation, and spelling (North, 1984; Boquet, 1999). These writing centers focused on creating flawless, well-edited texts, and the tutors often did most of the work to revise the text. It was not until after the 1940s that writing center mentors began to be consistent in encouraging writers to do independent thinking by teaching them to identify and correct possible errors themselves (Boquet, 1999). Tutoring sessions within the writing center began to focus on global issues in writing, such as improving content, organization, and addressing the focus of the paper rather than editing a text for solely local errors such as grammar, punctuation, and spelling errors.

The shift in writing center focus over the years does not mean that the tutor must avoid citing local issues when tutoring writing. The key of modern writing center theory is for the tutor to teach the writer to recognize mistakes in his work, to determine the problem, and to fix it appropriately. “Teaching” the student to proofread his work is the fine line between tutoring and providing a proofreading service. North describes these goals in writing center pedagogy as helping the writer to develop general patterns of thinking and writing, and focusing more on the process of how to write well rather than focusing on the paper itself (North, 1984). The student-centered focus enables the writer to actively improve his writing with less assistance after an initial visit to the writing center.

The shift in writing center ideals also helped writing centers create a more comfortable environment for student writers to explore and discuss their ideas with less fear of criticism of their thinking (Boquet, 1999). After the 1970s, the idea of the peer tutor was introduced to the writing center, transforming the relationships between the tutor and tutee. Elizabeth Boquet (1999), director of the writing center at Fairfield University, describes the writing center environment as a place where the “tutor has as much to learn as they have to teach” (p. 474).

A great deal of the “idea” of a writing center is defined by the role of the tutors that run the center. In the majority of university writing centers, undergraduate and graduate students staff the center as tutors. The peer-to-peer environment creates a unique relationship between writer and tutor conducted in a more relaxed environment than the usual teacher-to-student environment. The writing center also provides a means of immediate feedback for the writers, enabling them to engage in discussions about their texts, an opportunity that is rarely available in the professor-student relationships (Boquet, 1999). The writer-to-professor relationships and writer-to-peer tutor relationships exhibit sharp differences in the way the two groups approach writing. Professors generally follow a directive model, passing down information. Students regard professors as more experienced, more set in their ways, and as the final authority in their academic writing (Pemberton, 1997). The environment in the classroom is more authoritative, demanding respect and attention, and rarely offers opportunity for feedback from the student. Peer tutors, on the other hand, are often instructed to take a more facilitative approach to writing (Suffredini, 1998). The environment in the writing center has small groups or one-on-one sessions that encourage discussion, and promote the thoughts and feelings of

the writer with regard to their work (Suffredini, 1998). The tutors are available to the student to offer feedback about the paper, initiating patterns of thought that lead the students to improve their own writing (Pemberton, 1997; Suffredini, 1998).

Assessment of the writing center helps determine if the center is successfully creating a comfortable environment, where tutors and students can engage in discussion about texts and students actively learn to identify and correct their own writing errors.

The Writing Center at Worcester Polytechnic Institute

The WPI writing center implements many similar student-centered writing center teaching techniques. The primary goals of the WPI writing center are to train tutors to *“help writers to think critically about their goals, to consider how an audience might respond to key points and evidence, and to examine the impact of organizational and visual elements of writing”* (CCAC Website, 2006). The center trains its tutors in a seven-week course called Peer Tutoring in Writing, using texts such as the *Allyn and Bacon Guide to Peer Tutoring* as a basis for tutoring and writing center pedagogy. The center advocates teaching students to examine written works first for ways to improve global issues such as content, organization, and developing ideas. Afterward, the tutors then help the writer identify local issues such as grammar, punctuation, citation, and spelling errors. Overall, the staff of the WPI writing center teaches student writers to recognize and correct weak areas in their own writing so that the student writer can then apply what they learned in later composition.

The WPI writing center needs to conduct regular assessments to ensure that its tutors are using teaching strategies that are appropriate for all types of revisions and that the tutors are working to fulfill the goals of the writing center.

What Assessment Means for Writing Centers

Defining the success or failure of a writing center depends on the goals and objectives of the center as well as the audience toward which the assessment is geared. Olson Moyer and Falda (2002), student researchers in writing center assessment, are quick to point out that the approach to assessment should be formative, not summative, and should explore whether a writing center is accomplishing its intended goals. A formative assessment approach feeds back into the writing center curriculum and helps students and tutors improve or develop the ways that they learn and teach and should never be used to pass judgment on the writing center (Thompson, 2006). A summative approach to assessment is similar to an evaluation, looking at the result of student sessions, grades, or student texts and passing judgment regarding whether the writing center services are or are not a success. A summative approach will often lack details or reasons why a program has or has not been successful.

Andrea Zachary (2005), head of the Society for Technical Communication at Oklahoma State University points out that a summative approach to assessment may occasionally be necessary in assessment, such as for annual report, where a writing center must present numbers, charts, and other “visual” data that can represent their success to administration and funding committees. This type of summative approach to assessing data from the writing center may be used to make crucial decisions about future funding and staffing of the center, and it should not be ignored when considering different techniques for writing center assessment.

Still, many researchers experienced with writing centers and their progress argue that the center usage data from databases, survey results, and other statistical data in

annual reports is too superficial to assess the writing center in terms of how the center should make changes in curriculum, teaching strategies, or methods. Statistics also do not show the writing center staff the improvements that students are or are not making due to writing center instruction. The primary reason why writing center directors use statistical data in annual reports is because it is easier to visualize the data in graphs and charts and draw quantitative conclusions about how writers utilize the services of the writing center.

The writing center must implement a different type of assessment beyond a statistical analysis of center usage to determine how the center should improve. The methodologies from non-statistical assessment techniques yield more descriptive results, usually consisting of user opinions and feedback. This type of qualitative data is much more difficult to visualize and the conclusions based on the data are much less clear-cut. This type of data usually feeds back into the writing center curriculum leading to changes in the way that the tutors teach writing strategies or leading to starting new workshops or projects based on student demands. Olson et al. (2002) describe the benefits of qualitative research as a means to improve communication between the writes and the readers. They compare the assessment process to a tutoring session for the writing center – it is a means to ask questions and probe ideas to reach better solutions that develop through the interaction between the center and its users.

Both a summative and a formative approach to assessment techniques are important to the writing center, as well as gathering both qualitative and quantitative data. For each approach to assessment, the writing center must implement different research methodologies. To determine what types of assessment are appropriate for the writing center, the researcher must ensure that she has a clear goal and objectives that dictate what

the assessment is “looking for,” and have a specific question in mind to answer about the writing center.

Common Problems with Writing Center Assessment

One of the first impulses in writing center assessment is to attempt to evaluate changes in students’ writing as an indicator of their improvement as writers. Researchers Olson, Moyer, and Falda (2002) caution “... the assessment of writing programs can easily become distorted by issues having to do with the assessment of writing” (p. 112). Assessing a student’s writing is not as important as determining what influences the writing center had on the student writer. Furthermore, if the intent of the writing center is to develop better writers rather than better papers, then the student writer must not only demonstrate that he has understood how to make changes within a tutoring session, but he must also demonstrate continued competence in applying what he has learned to future writings. Therefore, assessment of writing centers should be careful to focus on the student writer as the subject of the assessment and explore the process of writing more than product, which is the text itself. Many writing center coordinators hesitate to conduct assessment because they believe that the results may undermine or under represent the true benefits or value of the writing. Such fears are unfounded if the correct types of assessment are chosen to learn more about the writing center.

Assessment Methodologies: What do we want to know about ourselves?

Choosing the right assessment technique requires researchers and the writing center to determine what they would like to know about themselves, as well as they type of data they want to collect. Table 1 gives an example of the different areas where a

writing center may focus their assessments and the different types of assessment that writing centers commonly use for each category.

Table 1: Focus Areas for Writing Center Assessment

Writing Center Usage
Database Information (Center Usage Data) User Profile Surveys
User Expectations
Discussion and Focus Groups Interviews (Formal and Informal) Pre and Post Session User Opinion Surveys
Interactions and Processes
Exploratory Case Studies Tutoring Session Observations
Writing Assessment
Writing Portfolios

The first and most basic form of assessment in a writing center is one that most writing centers already do – to collect and analyze center usage data from databases and registration forms. When students register for a session in the CCAC at WPI, the writing center collects information such as their name, year of graduation, major, advisor, what type of project they are working on, what type of assistance they desire, and the name of their academic advisor. A writing center may gather this information through registration online, on a form in the center, or through user profile surveys conducted by the tutor before the tutoring session starts. After a session at WPI’s writing center, the online system also records the date and time for the session, the name of the tutor, and whether it was the student’s first appointment in the writing center. The information from writing center usage data indicates who uses the writing center, and when. Writing center directors most commonly use this type of data in the annual report, quoting statistics and the number of sessions filled in a year.

Although writing center usage statistics can begin to paint a picture of how writers use a writing center, Luke Niiler (2005), a writing center director at the University of Texas, cautions that statistical analysis of database information alone can be misleading – in many cases *under representing* the value of a writing center. Niiler cautions that statistical and quantitative analysis of usage numbers is always more effective when paired with qualitative data that incorporates user opinions, experiences, and expectations.

User expectations form a second type of information that the writing center may collect to assess whether it is meeting its clients needs. Questions a writing center researcher might ask pertaining to user expectations are:

- *How visible and prominent is our writing center on campus?*
- *How do the students view the writing center?*
- *What type of help do they expect when they come to the writing center?*
- *What do the students expect from tutoring sessions?*
- *Are students getting the help they expected?*
- *Do the students find the tutoring sessions helpful?*

These types of questions require assessment techniques that directly involve the writing center's primary client: the student writer. The staff of the writing center might find the answers to these questions by conducting a survey that determines whether students are aware of the writing center and its services. In addition, tutors can give writers pre and post user expectations surveys before and after their tutoring sessions.

WPI conducts a small version of a user expectations survey, sent out after a tutoring session. It asks students to answer questions like:

- *How did you first find out about the CCAC (Writing Center)?*
- *Did you learn something about writing that you will use in future projects, presentations, or papers?*
- *Did the session have a positive impact on the specific paper/project/presentation on which you were working?*

However, when answering these questions, a student only has a few choices, and the results of several surveys only give a general idea of whether the students are finding their sessions useful. The survey does not allow the writing center to determine what areas might be lacking in tutoring services (Thompson, 2006). Even with the option of a comment box that allows students to suggest areas of improvement, it is difficult to get detailed information from surveys about true user expectations. At most, the survey data may tell us that 80% of student felt their session was somewhat useful, and 10% think it was not useful at all. To find out why the session was not useful, we need to have an assessment technique that tells us something more.

When answering questions that require a response beyond “Yes,” “No,” or “Maybe,” we must use an assessment technique that promotes a discussion, such as an interview or focus group. Interviews may involve students who do and do not use the center, tutors who work in the center, as well as professors whose students attend writing center sessions. Questions may vary for each participant, but interviews can provide a sampling of what people think of the center in terms of what they like, dislike, and would hope to see in the future.

The staff of the writing center at Fairfield University in Fairfield, CT, use focus groups as a means to assess writing center effectiveness. The idea to use focus groups came after staff at Fairfield University experienced repeated frustration with database

information that was too superficial for assessing improvement. The group recommends that writing centers hold focus groups several times a year as a means of having an in depth discussion with tutors, professors, and students who are involved with the writing center. Discussion in focus groups captures deeper ideas for improvement that survey and database data cannot provide. Another advantage of the focus groups is the opportunity to ask for clarification about a person's ideas or questions as well as the opportunity to build off each other's ideas to develop plans for writing center improvement. The social interaction that focus groups provide is the aspect missing from survey or database information and is invaluable for developing plans to improve a writing center (Cushman, Marx, Brower, Holahan, Boquet, 2005).

An investigation of user expectations is important for the writing center to continue providing services that its community desires to see. Still, the information gathered from user expectation assessments is primarily opinion, and though the researcher may loosely apply the context of each comment to a greater population, it may or may not apply to everyone.

The most important types of assessment a writing center should do are those that investigate interactions and processes that occur within the center during tutoring sessions. The simplest investigation into the processes that occur within the writing center is an observation of a tutoring session. A fellow tutor or the writing center director might conduct the observation and the observer might try to identify different teaching styles that the tutor uses, how the student responds to different suggestions, or how the students interact with the tutors, texts, and technology. The on-site observation is useful for assessing the individual work of tutors, as well as for monitoring if sessions are working

ideally in the space that the writing center provides. WPI's writing center conducts tutoring observations as a tutor-training tool, but those observations are not used specifically as a means to assess interactions or processes during the tutoring session.

Writing center staff can explore interactions within the writing center in more depth through an exploratory case study. A researcher can pose a question about the writing process, about how students and tutors interact, or about how students respond to different teaching techniques and then conduct a study involving the tutors and writing center resources to seek an answer to the question.

Research studies can be conducted by the writing center director, an outside agency, or by the tutors themselves. Olsen et al. (2002) comment on the value of students conducting research within their own organizations. They suggest that students understand the environment that are working in and tend to understand more when they pose questions about their environment themselves and then develop research studies to answer them. Not only do they learn to develop legitimate research curriculum, but they also begin to realize how difficult it is to conduct a concrete research study.

The final type of assessment in a writing center is to assess a student's writing itself. Many newer writing centers have tried to focus their assessments on evaluating a student's text, or the product of their writing rather than the writing process. Writing centers may attempt to track improvements in students' grades on texts and attribute the improvements to writing center sessions. A grade, however, can be a misleading indicator of success, and is not always related to the influence of a writing center. Experienced writing center directors do not recommend assessing writing as a means to evaluate the writing center.

Each of these different types of assessment techniques is important to exploring the workings of a writing center; however, this project focuses on one type of assessment technique: the exploratory case study. The writing center at WPI does not currently use this technique, but it is the most valuable technique for discovering ways to improve the services the writing center provides. The following sections give an example of how peer tutors can develop a case study to answer questions about interactions in the writing center and yield important information about how the writing center can improve.

AN EXPLORATORY CASE STUDY: What influences student revision?

An exploratory case study is a type of assessment that answers questions about the interactions or processes that occur in a writing center. To demonstrate the effectiveness of this technique, I conducted an exploratory research study to answer specific questions about writing center interactions and processes:

- **Who or what influences the revisions of students who come to the CCAC?**
- **How do students react to different influences when making revisions?**
- **What do those influences tell us about the students' authority when revising texts?**
- **How can tutors improve their tutoring techniques to enhance students' authority when making revisions?**

Identifying who or what influences a student's revision helps determine whether the tutor and the tutoring session have any influence over the student's revision process. Understanding who or what influences students' revision allows the tutor to be better informed as to how and why the writer makes certain changes. The writer may also respond to various influences differently. For example, the advice of an advisor regarding a text might influence a writer's revision more strongly than the advice from a peer.

Examining how the student revises based on comments from tutors or their advisors determines whether the writers are thinking critically about their revisions and learning to make their own revisions in texts. A student becomes a better writer if he is actively exercising his own knowledge and authority about what and how to revise and is continuing to apply it to other texts. If he is not improving his writing skills, the writer may exhibit a passive, one-time exchange of text, swapping suggestions made by tutors or advisors with his own text, and showing little or no ability to apply the revision process to future texts.

During the study, I tracked all of the changes that a group of students made in one of their texts from beginning to end and asked the students to comment on whom they thought influenced the changes in their writing. Observing who influenced the changes in the students' writing helped determine whether the tutors in a tutoring session were having any impact on a student's text.

The student writing project in this study is unique because it was written by a group of four students completing a proposal for their Interactive Qualifying Project (IQP) at Worcester Polytechnic Institute (WPI). The IQP, as defined by the WPI projects website, is a project that requires students to work in groups with an external community liaison to solve a greater community problem and "relate social needs or concerns to specific issues raised by technological developments" (WPI, 2004). The proposal-writing portion of the IQP is often difficult for the students because they must determine what problem they will solve and develop an approach for solving it. They must also coordinate these decisions with the community liaison, who many times they do not have the opportunity to meet until much later in the project.

IQP students also work with internal WPI advisors, who are professors and faculty on campus. WPI requires IQP students required to take a preparatory course that teaches how to construct valid research methodologies, organize and present data, and write a proposal. The students' project advisors may provide minimal instruction on the proper way to construct a proposal; however, the students gain the majority of the instruction for proposal writing through instructional manuals or advisor comments and feedback on drafts. In some cases, peer tutors from WPI's Center for Communication Across the Curriculum (WPI-CCAC) work with IQP students on their liaison letters, proposals, and ultimately the final drafts for their IQP.

Some advisors assign designated tutors to specific IQP groups to assist with writing the proposal. Designated tutors have previous IQP or MQP experience, and have the potential to help IQP groups make important revisions in their proposals, improving clarity organization, focus, content, and more. Little is known about whether tutors effect changes in students' proposals or to what extent a tutor influences changes in a student's writing. Moreover, the tutor's style of interaction with the students may also affect how students make revisions.

Studying the interactions between tutors, advisors, and students, and exploring what influences a student's revisions may help identify ways to improve the effectiveness of tutors who teach students how to succeed in the IQP.

EXPLORATORY CASE STUDY METHODOLOGY

The writing project I tracked in this case study was an introductory letter to the external community liaison. The liaison letter is the first contact the student group has with their external community sponsor, and they write it during the first week of the

preparatory course for IQP. The letter introduces each of the members of the team and describes the community project that the team hopes to complete. The letter allows the students to get approval from their community liaisons so both parties can coordinate their ideas for the community project.

Subjects

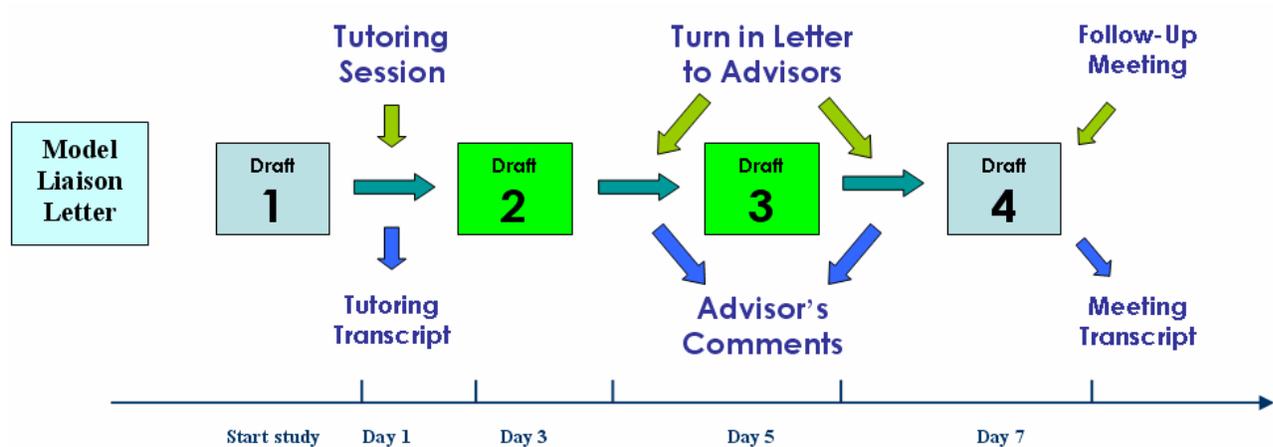
I asked one group of four students working on their IQP proposal in C term of 2006 to track revisions they made in three progressive drafts of the liaison letter. The group consisted of two females and two males and was advised by two faculty advisors. When the group joined the study, they had already completed the first draft of their liaison letter. No other parties had read or revised the letter, and I collected a copy of the first draft before case study began. The students met with me in an initial meeting to ensure that they understood the components of the case study and each agreed to track all changes made regarding the liaison letter. Tracking who and what influenced the changes in the group's writing helps tutors at the CCAC determine what strategies are most effective for assisting IQP students with revisions, and demonstrates who plays the greatest role in the revisions for the final product of the IQP.

The students received \$5 compensation for each meeting they attended with the tutor or the researcher for this study. Students also received \$10 gift certificates to the campus bookstore for their participation upon the conclusion of the study.

Types of Data Collected

I collected and analyzed four types of data in this study, including two tutoring transcripts, four drafts of the liaison letter, student commentary about what changes they

made in drafts and why they made those changes, advisor comments on the students' drafts, and student comments from a final interview regarding the case study. Figure 1



represents a timeline for when I collected each piece of data at various stages of the study.

Figure 1: Types of Data Collected

Students provided four drafts of their liaison letter. Tutoring session transcripts were collected from a tutoring session after the first draft. The students' advisors reviewed and provided comments for Drafts 2 and 3 (green). Students revised based on advisor comments to create the 4th draft, which they sent to the external community liaison. In addition to comments, the advisors provided a model liaison letter to guide the students' writing.

The students received a model liaison letter from their advisor during class and completed the first draft of their liaison letter, which I collected and labeled as Draft 1. The next day, a CCAC tutor uninvolved in the study conducted a tutoring session with the students to review their liaison letter. The tutoring session was tape recorded so I could examine the transcripts to determine whether the writers addressed the changes they discussed in the session. The transcript for this session is available in the Appendix A. I also observed the tutoring session and took notes about what the students and the tutors were saying but did not comment or become involved in the session.

In the following two days, the students edited their liaison letter based on the comments they received from the tutor, resulting in Draft 2 of the liaison letter. The writers submitted Draft 2 to advisors for comments three days after the tutoring session. The advisors returned comments to the students the following day, which were also forwarded to the researcher. Students revised their letter again based on the new comments to create Draft 3, and returned it to their advisors for comments. The writers revised their fourth and final draft based on the advisor's comments and sent the letter to their external community liaison. Copies of the drafts with the students' and the advisors' comments are available in the Appendix B.

While revising their drafts, I asked the students to track each change that they made from their original draft by turning on the Track Changes feature in Microsoft Word. The Track Changes feature uses different colored text to mark new additions and tracks text that the writers have deleted. I also asked the writers to use the Comment Feature in Microsoft Word to identify what changes they made, their reason for making the change, and who or what influenced the change, as shown in Figure 2. This setup was particularly useful for this project because there was more than one writer who edited the paper and each person editing was able to comment on why the writers made changes and what influenced them.

To identify changes that the writers made in their drafts and sources of revision I compared all four types of data. Comparing data from each of the sections enabled me to see who influenced changes

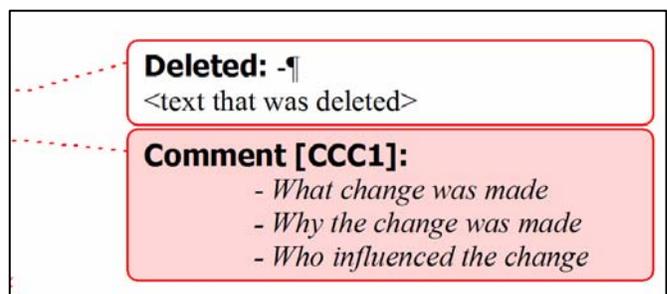


Figure 2: Microsoft Track Changes and Comment Boxes
Students used Track Changes to track revisions they made to their drafts and commented on why they made the changes.

in writers' drafts and how different types of commenting styles and teaching materials influenced the students' revision process.

I conducted a follow up meeting to clarify any information that I did not understand from the writers' comments and asked questions regarding the ease of the study and whether the students thought I could expand it to include an entire class. I also asked the students to discuss the model liaison letter they received in their preparatory class.

ANALYSIS OF DATA

For analysis I divided the different types of data collected in this case study into varying units of analysis and coded them.

Coding for Tutoring Transcripts

The tutoring transcripts, documented a conversation between the four writers and the writing tutor. I divided the transcripts into units of analysis called episodes and labeled whether writer or the tutor initiated the episode. An episode might include several turns of speaking between the writers and the tutor but all of the conversation in one episode pertains to a single aspect of writing. Fully coded transcripts are available in Appendix A.

I coded all fourteen episodes for three pieces of information, as shown in Table 2:

- Who initiated each episode (Tutor or Writer)
- What aspect of writing the tutor or writer was addressing
- What commenting style was used by the tutor

Table 2: Example of Tutoring Transcript Coding Scheme

Speaker	Transcript Text	Episode	Initiating Speaker	Aspect of Writing Addressed	Comment Style
Tutor	Letting them know your majors is good because then they can get an idea of your background and what you might already know	# 3	Tutor	Tutor approves content	<i>Affirming</i>

The person initiating the episode was either one of the four writers, or the tutor. The coding for these transcripts does not differentiate between individual writers because all four writers completed the editing of the liaison letter as a group.

Table 3 identifies six different aspects of writing that the tutor or writer addressed. I created the coding labels based on the global and local aspects of writing that occur commonly in tutoring sessions. Two independent reviewers coded both the transcripts to

ensure that the coding scheme was reliable and could be consistent for identifying what aspects of writing were addressed, and how many of each aspect occurred in each draft. If there was a discrepancy in coding, both reviewers came to an agreement on the correct coding label.

Table 3: Aspects of Writing Identified in the Tutoring Transcripts

Aspect of Writing	Definition of Problem
Content	Addresses relevance and quantity of information that is or is not relevant to the letter.
Format	Comments related to the format of the letter including structure, means of sending, fonts, spacing, labeling, etc.
Tone	Relates to how the paper might “sound” to the reader.
Grammar Punctuation	Relates to problems or changes made to the letter’s grammar or punctuation, including verb tense, commas, periods, capitalization, etc.
Sentence Style	Relates to sentence clarity, wording issues and other style aspects that involve sentence level changes.
Other	Tutor or writer asks a question or makes a comment unrelated to revision or aspects of writing.

I applied the third coding category, commenting style, only to the comments in the transcripts made by the tutor. Coding the type of commenting style the tutor used helps identify whether certain types of commenting styles influenced students’ revisions. The coding for commenting style labels whether a comment is affirming or guiding. An *affirming* comment will compliment or agree with the writers or support what they have already written. Below is an example of an affirming comment made by the tutor in the tutoring session:

Letting them know your majors is good because then they can get an idea of your background and what you might already know.

Note that this comment does not advise the students to make any changes, nor does it identify any problem with their writing. The tutor confirms that some of the content of the students’ letter is good, making this comment an affirming comment.

The second type of comment is a *guiding* comment. A guiding comment may identify a problem, explain a problem, give a general suggestion of how to fix the

problem, or give a specific suggestion of how to fix the issue, as shown in Table 4. I coded guiding comments by levels (Level 1, 2, 3, 4) because the commenter can provide a comment that guides the student to make a change at each level. The commenter may skip levels, providing a comment at a discrete level. Episodes in the transcripts where the tutor made both guiding *and* affirming comments were double-coded.

Table 4: Levels of Guidance

Levels of Guidance	Example of Comment
1) Identifies a problem	Is this the best word?
2) Explains the problem	What kind of a pronoun should you use to refer to people?
3) Makes a general suggestion	I think you can leave this out, as it is not very useful at this time. You need to provide just a bit about each student that may be relevant for the liaisons to know.
4) Makes a specific or direct suggestion	Wrong word. People are never referred to as "which." Try "whom" here.

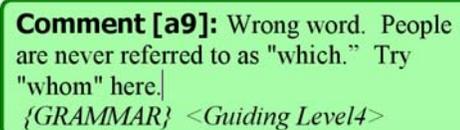
This method of coding follows the natural process of revision as presented by Linda Flower et al in “Detection, Diagnosis, and the Strategies of Revision”. Once a writer chooses to revise a text, he must first detect a problem, then diagnose or define the problem, and finally, choose a strategy to revise or rewrite (Flower, Hayes, Carey, Schriver & Stratman, 1986). The Level-of-Guidance coding scheme identifies whether the tutor or the advisor assists the writer in detecting the problem (Level 1), diagnoses the problem (Level 2), or helps to develop strategies to revise the problem (Level 3). A Level 3 suggestion is general, allowing the writer to decide what text to change to address the issue. A Level 4 suggestion, however, provides an exact solution for revising the text.

Coding for Advisor Comments

I coded the comments given to the writers by their IQP advisors in a similar manner to the tutoring transcripts. The units of analysis for the advisor comments were each individual comment from the advisor. Each comment was coded for the aspect of

writing that the advisor addressed, as well as the style of commenting the advisor used. The aspects of writing and the commenting style used to code the advisors' comments were the same as those used to code the tutoring transcripts.

Coding tutoring transcripts and advisor comments according to what aspect of writing each unit addresses allows us to understand what types of issues are most commonly addressed in this project, and can help identify if tutors and advisors address different aspects of students' writing. Furthermore, by adding a classification for commenting style we can compare how tutors and advisors respond to the students' writing and analyze how the students interpret and incorporate the suggestions made by both the tutor and the advisor. Figure 3 gives an example of how I coded advisor comments.



Comment [a9]: Wrong word. People are never referred to as "which." Try "whom" here.
{GRAMMAR} <Guiding Level4>

Figure 3: Coding for Advisors Comments
The aspect of writing that the advisor addressed and the commenting style were coded in each comment box.

Coding of Student Revisions

To identify if the writers made any revisions between drafts, I used a word count to determine the word differences between drafts and counted the total number of revisions tracked by Microsoft Track Changes. Next, I examined each revision individually, and coded each according to the aspects of writing addressed. I then compared the students' drafts to the tutoring transcripts and advisor comments. In most cases, the writers identified one source of influence for each change. The writers identified the tutor, the advisors, and themselves as sources of revision. Any additional changes that I could not trace back to comments made by the tutor or advisor I attributed to the writer as an influence for the change. I also compared the commenting styles that

the advisor or the tutor used to each revision to determine whether commenting style influenced the way that the students revised their texts. Figure 4 shows an example of the revisions and comments students made with the Track Changes feature. The students' revised drafts and coding for each draft is available in Appendix B.

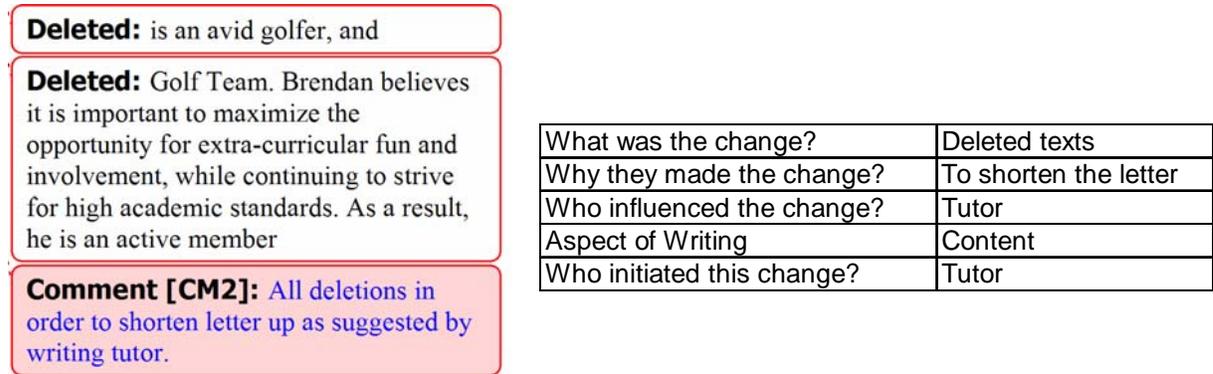


Figure 4: Example of writers' comments
Writers comment on what change they made, why they made the change, and whom they believed influenced that change.

Final Interview

Although the final interview was tape recorded, no transcript was created. I used the information from the final interview to supplement the analysis and discussion about what types of influences affect a student's writing and revision.

RESULTS

I examined the results of the case study to answer my question about who or what influences revisions, how students apply those influences, and how those influences affect the students' personal authority in revision. I discovered that the primary influences on the students' revisions in this project were the tutor and their advisors. Both influences had different methods of approaching writing issues in the texts and their different styles affected the way that students made their revisions.

Tutors and Advisors Focus on Different Aspects of Writing

Coding for both tutoring transcripts and advisor comments showed that tutors and advisors focus on different aspects of writing in texts.

Table 5 tallies the different aspects of writing addressed by the tutor in the tutoring session for Draft 1 and for the advisors comments on Draft 2. Content was the aspect of writing addressed most frequently by the tutor, although she and the writers did discuss some other aspects of the paper such as sentence style and format. Interestingly, the tutor did not flag any grammar or punctuation errors within the text. These tallies indicate that the tutor tended to focus more on global issues when addressing the liaison letter rather than local issues such as grammar and punctuation.

Both advisors tended to focus on grammar, punctuation, and sentence clarity aspects of the text, rather than content or tone. Focusing on the editing of local issues is a common trend among advisors when they are commenting on a student's paper. The focus on the local issues may also be in part because the tutor has already addressed some of the major global issues in the paper and the writers already revised their letter concerning those comments.

Table 5: Tally of the Aspects of Writing Discussed

Aspect of Writing Discussed	# Discussed by Tutor in Transcript (Draft 1)	# Discussed by Student in Transcript (Draft 1)	# Discussed by Advisor 1 in Draft 2	# Discussed by Advisor 2 in Draft 2
Content	5	1	2	3
Format	0	2	1	1
Tone	1	0	1	1
Grammar or Punctuation	0	0	6	4
Sentence Style	0	2	1	4
Other	3	0	0	0

Tutors and Advisors Have Different Commenting Styles

The coding for commenting style also indicated that tutors and advisors gave comments with different styles. The commenting type used by the tutor was overwhelmingly supportive; the tutor supported many of the statements made by the writers by affirming what they already knew or praising parts of the letter that were already written. When the tutor did use a guiding comment, her comments were at Guiding Level 2 and 3, leading the writers to detect the writing issue and hinting at a strategy to revise. The tutor framed possible revision strategies by simulating the audience's response, causing the writers to consider how the reader might view the letter before they decided how to make a revision.

The style of commenting that the advisors used was opposite that of the tutor. Both advisors gave few or no affirming comments, but rather, provided specific examples or changes for the writer to correct in their texts with Guiding Level 3 or 4 comments. Understanding the types of comment an advisor typically makes to the student helps a tutor know how to help students in later versions of their drafts.

Table 6 shows that although the advisor and the tutor are addressing similar aspects of writing in the liaison letter, their approach and commenting style differ greatly. While the tutor took a supportive role with affirming commentary and general suggestions for writing revision, the advisor took a more authoritative role, providing more direct, specific comments about what and exactly how to revise in the text. By following the writers' changes from text to text, it is possible to examine whether the type of commenting influences how the student makes his revision.

Table 6: Tally of Commenting Style

Comment Type	# times cited by tutor in transcript	# times cited by Advisor 1	# times cited by Advisor 2
Affirming	8	2	0
Guiding L1	0	1	0
Guiding L2	3	0	5
Guiding L3	2	2	3
Guiding L4	0	6	5

How writers are influenced by comments in a tutoring session - Draft 2

To determine whether the writers changed their document from one draft to the next, I compared revisions between the first and second drafts. The Track Changes function in Microsoft Word recorded eighteen revisions and a difference of more than 100 words between drafts. These changes indicate that the students did make substantial revisions in their drafts after the initial tutoring session.

Draft 1 Word Count: 800 words Draft 2 Word Count: 693 words Difference: 107 words Revisions: 18
--

Draft 2 was the first revision that the students made to their letter after meeting with the tutor. Table 7 shows that the writers made the most revisions regarding the content and sentence style of their letter. This corresponds with the types of comments made by the tutor during the tutoring session, where over half of the comments made by the tutor addressed those two aspects of writing. Also interesting to note is that the students did not make any revisions related to format, although it was a topic they discussed during the tutoring session. Instead, the writers made a decision not to change the format of their letter. They also did not revise grammar or punctuation in this draft. The trend of the students' revisions indicates that they tend to revise according to the same topic that they address in the tutoring session.

Table 7: Aspects of Writing Revised in Draft 2

Aspect of Writing	# Revisions
Content	9
Format	0
Tone	1
Grammar/Punctuation	0
Sentence Style	8

I compared tutoring transcripts to the revisions the students made and identified how many revisions the tutor initiated, and how many changes the writers completed on their own. Table 8 shows that the writer initiated more changes than the tutor did after a tutoring session. This shows that the writers are taking an active part in revisions for this draft, using both the tutor's suggestions and their own ideas to revise their text.

Table 8: Draft 2 - Who initiates revisions?

Writer Initiates	Tutor Initiates
10	8

The second draft of the liaison letter from Appendix B shows that the writers removed several sentences with personal information to reduce the length of the letter. The tutor did not specify what content to remove from the paper, so the writers took the initiative to determine what pieces of information they should remove and what information they wanted to retain in the letter. Many of the changes initiated by the writer were sentence clarity changes such as adding words to complete sentences after deleting content in the letter. The writers' active involvement in initiating their own changes in their text indicates that they have some authority over their revisions and are not solely making the changes that the tutor recommended.

How writers revise in response to their advisors comments - Draft 3

The third draft was the revision that the students made to their letter after receiving comments from both advisors. Draft 3 was another one hundred words shorter than the second draft, and took into account all of the advisors comments in twenty revisions.

Draft 2 Word Count: 693 words
Draft 3 Word Count: 607 words
Difference: 86 words
Revisions: 20

Table 9 shows that the writers heavily revised their sentence style according to the comments from the advisors and revised some aspects of content, format and grammar or punctuation in the letter. The writers addressed fewer global issues and began fixing local issues perhaps according to a logical trend; because it is the third draft of a single letter the students should be close to completing their final revision.

Table 9: Aspects of Writing Revised in Draft 2

Aspect of Writing	# Revisions
Content	4
Format	2
Tone	0
Grammar/Punctuation	3
Sentence Style	11

These revisions correlated closely with the comments the advisors gave about the letter. In most cases, when the advisor requested a change, the writers changed exactly what the advisor requested (Table 10), showing that the writers were heavily dependent on advisors comments for revisions in this draft. In only two cases did the advisor request a change and the writers made their own revisions without receiving direct instructions in a comment.

Table 10: Draft 3 - Who initiates revisions?

Writer Initiates	Advisor Initiates
2	18

The writers did not initiate many revisions in the third draft, but instead only revised as the advisors suggested. As noted in the section *Tutors and Advisors Have Different Commenting Styles*, the directive style of commenting used by the advisors was very specific, nearly always at Guiding Level 3 or 4. Guiding Level 4 comments often limit the students' ability to make personal decisions about the revisions they make. The writers in this study tended to make the exact changes that the advisor recommended, without questioning whether they should make the change or not. Furthermore, the advisor told them precisely how to make each change, meaning that the writer did not need to take an active part in thinking about how to make a revision.

Pulling an example from the text best highlights how directive comments limit a writer's creativity in revision. Figure 5 shows original text from the letter and one of the advisor's comments about the content. This same piece of text had been addressed earlier by the tutor with a Guiding Level 2 comment; however, the writers chose not to remove this portion in Draft 2.

He works part time for a local Biomedical company, plays guitar, and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Comment [u1]: I would drop this. I believe you are trying to be funny, but the liaisons may not get the humor (cross-cultural issue) so it is best in this type of letter to avoid humor.

Figure 5: Example of Text and Advisor Comment
Student text and a Guiding Level 4 comment from one of the advisors.

After receiving the advisor's comments, the students revised their letter and their text appeared as in Figure 6. Note that the text that the students deleted is identical to the text the advisor highlighted (in green, Figure 5) in his comment.

He works part time for a local Biomedical company, plays guitar as well.

Brendan is also a junior at WPI and is pursuing a major in Actuarial Mathematics with a minor in Management.

Comment [CM2]: Deletions were made to shorten letter as suggested by advisors

Deleted: , and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Figure 6: Students' revision because of advisor's comment

Furthermore, when the students did revise the sentence, they simply added words, leaving the sentence incomplete. They turned in their letter for a final review without noting that the new sentence they created had errors. This indicated that the students did not re-read or revise their letter after changing the comments the advisor recommended. Instead, they only deleted the parts the advisor recommended and completed the sentence improperly. Examples such as this one occur commonly in student revisions, indicating that the writers are not exhibiting creative thinking nor exerting any personal authority in revision when making changes that stem from directive comments. A piece of text that they originally decided not to change, even though the tutor mentioned it, they changed in light of the advisors comments. When the writers did revise, they revised without much thought about their revision.

In the final interview, I asked the students to comment on why they decided to keep this piece of text in their letter after discussing it with the tutor, but after the advisors commented, they took it out. One writer commented, "We decided to take it out just to be safe – I guess." Another writer added, "They [the advisors] killed it, basically." These comments show that the writers did not have a particular reason for revising the text, other than the advisor told them to do so.

DISCUSSION

The students made many revisions between their first and final draft; however, the different influences during the students' revision process greatly affected the way they revised. The writers were able to make effective revisions to their second draft based on the indirect comments that the tutor provided. The tutor helped identify a problem area but left the revision process in the hands of the students. The indirect and facilitative style of commenting prompted the students to think critically about their writing and determine how the reader would respond. The students were able to maintain their personal authority in revision by choosing what parts of their letter they thought were appropriate to add or remove. Personal authority in revision is based on writers' previous knowledge and experience, their confidence in applying what they know to their revisions, and having the opportunity to think critically about the revision process and generate changes themselves. The supportive comments that the tutor provided also encouraged students to think about revision by compelling them to recall information and revision strategies from previous classes or writing experiences. By supporting the writers in what they already knew, the tutor enabled the writer to make future revisions themselves.

Evidence shows that the WPI CCAC is successfully training tutors

The types of issues that the tutor addressed (global issues) and the type of commenting style she used (affirming and low-to-mid level guiding) indicated that she was following the tutoring format taught in the Peer Tutoring in Writing class at WPI. Her style of tutoring helped build the writers' confidence in what they already knew, but also allowed the writers to make their own decisions about revisions in their letter. She

provided guiding comments that hinted at a solution to the writing problem, but did not fix the problem for them. This strategy is part of the student-centered pedagogy the tutors are taught to use in the writing center.

WPI's CCAC website (2004) describes the services they provide:

Tutors help writers to think critically about their goals, to consider how an audience might respond to key points and evidence, and to examine the impact of organizational and visual elements of writing. Tutors do not copyedit or "correct" students' papers, although they might teach editing strategies or review rules of grammar or punctuation that students may then apply to their own writing.

The tutor does encourage critical thinking about revision, particularly in terms of how the reader would respond to the writing. The tutor's commenting style limited the editing she did for the students and she supported the writing and revision strategies that the writer already knew, such as strategies for removing wordiness from the letter. These observations strongly indicate that the CCAC is meeting its goals to train effective tutors and provide a certain type of tutoring services to the WPI community.

The CCAC should teach tutors to give more affirming comments to writers

To bring students to the stage where they are confident in exercising their own authority in writing, both tutors and advisors must help students build confidence through affirming comments about their texts. Writers may have a general idea of how to revise, but will seek approval from another source before taking action. Seeking approval is normal and should be encouraged. Once the writer receives positive feedback for something she knows, she will be more confident in applying it to her writing in the future (Auten, 2005).

One example where the writers in this study were seeking approval occurred in Episode 5 of the tutoring transcript, where the students asked the tutor a question about sentence style, referring to the wordiness of their letter due to “sentence openers.” One of the writer’s comments:

Sometimes we were wondering about the openers, I dunno, we learned in classes, are there too many of them, too...how do they sound, like we can just cut it...

The tutor listened as the writer explained the issue and affirmed their revision by saying “*yeah, those [the sentence openers] can definitely be taken out.*”

During the final interview, one of the writers mentioned that a high school English teacher told her not to use extra words at the beginning of sentences, such as “Due to the fact that” or “for this reason,” etc. She remembered that her teacher told her that all she had to do was remove those “sentence openers” and she would be a good writer. This example highlights a moment where the writer was recalling past knowledge about writing and working to apply it to a future text. By doing so, the writer was thinking critically about and exercising her own authority in her revisions. Still, she was unsure about the validity of her knowledge, so she asked the tutor to affirm.

Affirmation of a student’s previous knowledge is one of the most important roles a tutor and advisor must play to help a student become a better writer. A good writer has the capability to detect, diagnose, and find a strategy to revise their own texts, but cannot do so without a basic knowledge of what they need to revise (Flower et al, 1986). Currently, tutors are playing a supportive role for the writer; however, it is not an aspect that is emphasized in the Peer Tutoring in Writing course at WPI. The Peer Tutoring course should emphasize the importance of letting students know when they have made

revisions based on their own knowledge. A tutor may comment, “*That’s right! See... you knew what to change even without my help. Be sure too look for those same issues in the rest of your paper since you already know what to look for!*” The emphasis then is on the capability of the writer, and letting the writer know she *already* possesses the ability to make the revisions, but she must gain the *confidence* to make the revisions herself. By emphasizing this role in the Peer Tutoring class, a tutor is not only taught to make facilitative, indirect comments that promote critical thinking, but they are also taught to recognize a student’s previous writing knowledge, and use it to build the students confidence in their own authority for revisions. An emphasis on an affirming commenting style will also encourage writers to engage in more discussion and leave them feeling as if they can explore their ideas in a comfortable environment, without fear of criticism (Boquet, 1999).

Professors should give more affirming comments to writers

Professors and other advisors should also be aware of their job to support students in learning how to write confidently. The advisors in this study provided very few affirming comments to the students about their texts. Because professors have a greater influence over student’s writing, they should also be aware that affirming comments from them boost a student’s confidence by a greater amount. While a professor is working to identify the areas in a text that the writer can improve, he should identify of sections of text that were well written, made a good point, or showed creativity in writing. These comments will boost a student’s confidence in their writing and enable them to improve similar texts in the future. In addition, the affirming comments will help relieve some of the anxiety that students feel after receiving a returned text full of advisor comments.

These types of comments may require an increased focus or time commitment from the professor, which may be difficult if he is managing several students; however, they are essential for building a better writer.

Tutors and advisors should avoid overly directive comments

Some writers have difficulties identifying problems in their texts and need more guidance or prompting to revise their texts. For this, tutors and advisors step beyond affirming comments into guiding comments, but should avoid telling the student how to revise. The writers in this study made appropriate revisions based on directive comments that the advisors gave; however, the students viewed the advisors comments as indisputable and in most cases made the exact changes the advisor requested and no others. The writers forfeited their personal authority in revision and instead made the exact changes the advisors requested, even to the point of leaving incomplete or incorrect sentences after making revisions. This shows that a directive style of commenting severely limits the amount that students think critically about their paper. Directive commenting also removes much of the chance a student has to recall past experiences in writing, and inhibits their ability to learn how to apply appropriate changes because the “work” in making revisions is done for them. Directive commenting may seem like it produces a better text, but writers do not learn to revise from those comments, meaning they are likely to make the same mistakes in future writing.

Both professors and tutors should be conscious of providing comments to students that lead them through revisions up through Guiding Level 3 – diagnosing the problem and beginning to select a strategy. The writer is more likely to consider his own revisions if the answer is not already given to him. A comment may provide an alternate example

or simply mention a technique for revision instead of replacing the words or revising sentences for the writer. Using this technique prevents the writer from becoming overly

Levels of Guidance

- 1) Identifies a problem
- 2) Explains the problem
- 3) Makes a general suggestion

-
- 4) Makes a specific or direct suggestion

dependent on comments to decide what to revise and instead the writer makes independent choices throughout all of her future revisions. Moreover, it allows the students to understand why they are making changes, preventing them from revising blindly without understanding the purpose of their revisions.

Students can also become overly dependent on models that professors provide to them as examples. During the tutoring session, the writers mentioned that the example liaison letter they received was almost two pages long, had a paragraph of personal information for each group member, and did not have much information about the intended community project (Episode 8). The writers mentioned in the tutoring session that they doubted the model, but copied its structure because it was supposed to be an example of what the professor wanted. When I asked the students to comment about the model liaison letter in the follow up interview one of the writers admonished:

I think they would have wanted to provide us with a better example next time, because if you follow the model – the one he gave us for the letter – you would come back with a massive number of comments – that it was too long, it was too wordy, it had too much information about you – whereas usually a model is supposed to set a good example... they [the advisors] need to realize that a lot of student groups will go straight for the model because those are the requirements.

The striking similarity of the students' liaison letter to the model liaison letter supports the writers' comment – that students will follow a model closely, even if they

doubt its validity. Although many professors comment that a model letter is not inherently perfect, it is clear that students will use the model as an ultimate authority for their texts. Thus, if professors are going to provide a model for their students at all, they should introduce the model by having the students think critically about the text and find areas where they think they could improve the model. This sets the precedent that the model is not perfect and that the students have the ability to make changes that surpass the examples that the advisor has given.

Two-way communication is essential for writers

This case study explored the way that tutors, advisors, and students communicated about writing and how their relationships developed with each other during the period of a writing assignment. The communication that occurred in this case study was similar to a model presented by Suffredini (1998) in the Writing Lab Newsletter. The model describes a triangular relationship between the three participants in the writing process. I revised the model to fit the results of this study, as shown in Figure 7.

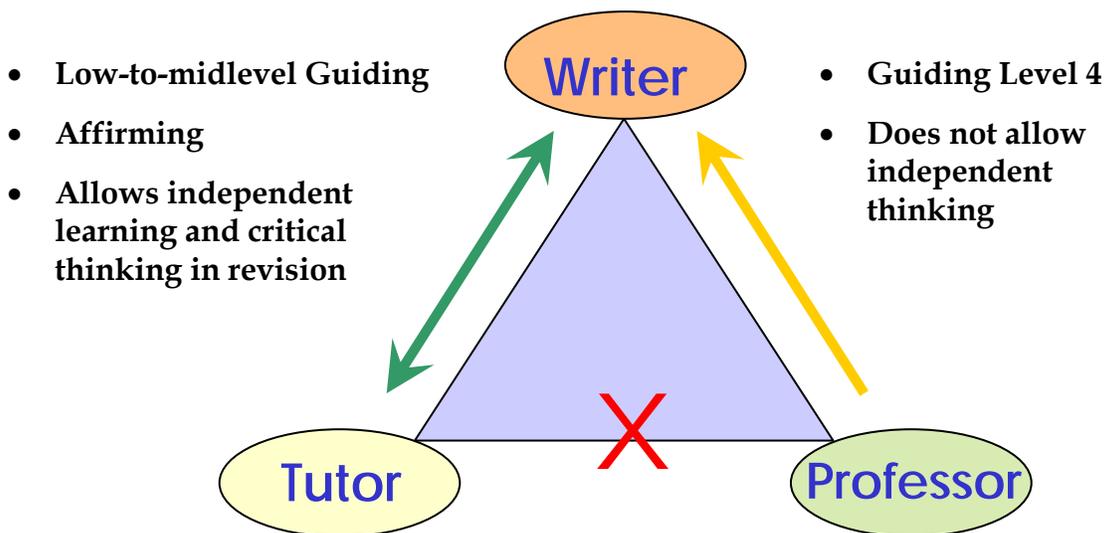


Figure 7: Relationship between the tutor, professor, and the student

I noted throughout this study that the tutor and the writers have an open, two-way form of communication, where the writers freely ask questions of the tutor and receive an immediate response, and the tutor ask questions of the writers for clarification or to help the students think about how to improve their revisions. The relationship between the professor and the student, however, is more of a one-way communication line. The professor provides feedback to the students, but the students rarely respond to, question, or criticize the revisions or comments that the professor makes. In addition, the feedback from the professor is usually delayed, which makes it harder for students to keep a continuous thought process regarding revision of their assignment. Finally, the relationship between the tutor and the professor, particularly throughout the case of this study, is limited or non-existent. The tutor had no opportunity to contact the professor or receive any additional feedback about the assignment requirements, the professor's preferences, or to hear more about the group from the professor. In addition, the professor did not hear back from the tutor about the difficulties that the students were having when writing their liaison letter.

Identifying the lack of communication between tutors and professors highlights a crucial area where the CCAC can improve its services to the WPI community. The communication between the tutor and the professor is crucial because the writers often come to the tutor asking the tutor what the professor wants to see in the paper. Without effective communication between the two, both the professor and the tutor are missing valuable opportunities to teach students how to improve their writing. Professors can give valuable information to tutors by clarifying their assignment requirements and discussing areas where students commonly fall short or need more assistance when completing the

assignment. By learning this information from the professor, the tutor can then be more aware of those problems, and can help the students identify them and improve their writing. In return, the tutor is able to relate to the professor what the students did not understand about material learned in class or about the assignment. This information helps professors clarify their goals in class, and give additional instruction if necessary. In addition, the professor may learn that students respond differently to teaching than the professor anticipated, such as in the case of the model liaison letter or the advisors' directive comments. By improving communication between the tutor and the professor, both parties are able to learn more about how the writer assimilates and applies information in relation to writing and revision. This relationship is particularly important for designated tutors and IQP advisors because the tutors work repeatedly with the same advisor.

WPI CCAC should implement journal partnerships between tutors and professors

Hobart and William Smith Colleges in Geneva, NY remedies the lack of communication between tutors and professors by establishing journal partnerships. In the partnership, the tutor maintains a journal about the types of problems she encountered in a tutoring session and what types of questions, concerns, and difficulties the students were having in developing the assignment. The tutor then passes the journal to the professor, who responds to the comments, clarifying the assignment where necessary and occasionally providing more information about what the professor has already taught the students during classes. The partnership at Hobart and William Smith Colleges has been extremely successful, and both professors and tutors alike have discovered that the

improved communication has enabled them to improve the way they instruct students in writing (Salibrici and Levesque, 2005).

The CCAC should strive to implement a similar partnership between professors whose students frequently request tutoring services. This is particularly important for designated tutors and the IGSD. Although a handwritten journal may not be practical in WPI's high tech environment, the tutor and the professor could easily duplicate the communication via email, and briefly meet once a week to discuss issues that arise relating to tutoring session and how students are understanding the information they receive.

WPI CCAC should implement more in-depth assessment techniques

The WPI CCAC should strive to implement a formal assessment plan that includes assessment techniques that evaluate writing center usage, user expectations, and interactions and processes within the writing center. Currently, the CCAC only collects center usage data and post-session user surveys. Occasionally tutors complete an observation of a session, but the observations are not intended specifically for writing center assessment. WPI's writing center should consult the information in "Using focus groups to Assess Writing Center Effectiveness" from The Writing Lab Newsletter and consider conducting focus groups with tutors, students, and professors to learn more about user expectations for the writing center.

Focus groups, like all assessment techniques, must have a clear objective and a specific set of questions related to the goal of that session (Cushman et al, 2005). The questions asked in a focus group do not necessarily need to be different from the types of questions the writing center asks on a user expectations survey. In a focus group,

however, the moderator and the participants can engage in discussions about each response, focusing on the *why* and *how* to implement changes and achieve greater user expectations rather than simply noting whether the user was satisfied. If the objective of a focus group were to discover ways to improve the writing center, the moderator would lead the conversation to discover 1) what the writer center *already* does well, and 2) to find areas where services are lacking or non-existent. The moderator may start the conversation with questions such as:

- *What suggestions do you have for improving the writing center?*
- *How do you feel that the writing center helps you best?*
- *Are there any additional services you would like to see the writing center provide?*

The moderator should be familiar with the objective for the focus groups, and will lead the discussion to try to uncover new ideas for improving the center, or will help identify services that writers enjoy most.

Furthermore, the writing center should require each of its tutors, or groups of tutors to conduct research studies that explore the interactions and processes that occur in the writing center. The exploratory case study I conducted as a tutor provides valuable information to explain the processes that occur in a writing center, but also illuminates areas where the writing center needs improvement. These research studies can also confirm that the writing center is successfully meeting its goals and providing useful services to the writing community. Moreover, the tutors who complete these studies learn more about the environment they work in and have a better understanding of how to help writers when they tutor. They also gain the experience of developing a case study and discovering how difficult it can be to construct valid research (Olsen et al, 2002.) The

studies that the tutors complete may be on a smaller scale, such as tape or video recording their sessions and examining what types of commenting styles they use, or identifying types of body language that indicate whether a writer understands what the tutor is explaining. Students who complete the Peer Tutoring in Writing course do a similar project in class but would also benefit from continuing research in writing center interactions and processes after they gain more experience as a tutor.

During the final interview I asked the writers whether they thought this case study would be feasible to conduct on a larger scale, such as for an entire classroom, or throughout the entire process of writing the IQP proposal. The students commented that although it was not too difficult to add comments and track their revisions, they felt it would be annoying and too time-consuming to do throughout the entire proposal-writing process. To expand the study to an entire classroom it would be necessary to involve several researchers, because analyzing and tracking all four types of data was very time consuming. Larger studies, such as this one may not be feasible for individual tutors to implement within their normal work schedule. Overall, this particular case study is valuable for small-scale writing projects. It may be beneficial to repeat this study for individual students working on course papers to determine if interactions and dynamics in revision differ between group writing projects and individual compositions.

CONCLUSION

Assessment for writing centers does not only yield statistical data for annual reports, but is also essential for determining whether the program is meeting its goals and providing useful services to the writing community. Valuable writing center assessments should evaluate center usage data, user expectations, and most importantly, explore the processes and interactions that occur between the participants in the center. Each different technique for assessing writing centers provides answers to questions about how writers interact with their text during tutoring services.

WPI's writing center conducts only the most basic forms of assessment and lacks the in-depth, formative approach to assessment that shows the writing center how to improve its tutoring services. The CCAC should move beyond assessing its services with only data from writing center usage or user opinion surveys and begin to explore user expectations through focus groups on campus. Tutors in the writing center should also be encouraged to develop small exploratory case studies that answer questions about the processes and interactions that occur within the writing center.

The case study highlighted in this report illustrates the value of in depth assessment technique conducted by one tutor. A single study yielded several recommendations of ways to improve the writing center. The case study also demonstrated the differences in how tutors and professors interacted with students' texts, emphasized the importance of building a writer's confidence to improve his personal authority in making revisions, and showed how to improve communication between tutors, professors, and students who use the writing center.

The goal of a writing center is to produce better writers, and to do so, the writing center staff must be constantly assessing the services they provide and improving tutoring techniques to fit the needs of their users. Tutors must explore and understand their environment to become better teachers of writing, and must learn to provide the support that growing writers need to build confidence in their revision skills. Regularly implementing in-depth assessment techniques such as the ones described in this report will benefit the writing center and its staff as well as the writers who come to the center seeking to improve their writing.

BIBLIOGRAPHY

- Auten, J. (2005). Following the script: Peer readers and the language of feedback on writing. *The Writing Lab Newsletter*, 29(5), 1-5.
- Boquet, E. H. (1999). "Our Little Secret": A History of Writing Centers, Pre- to Post-Open Admissions. *College Composition and Communication*, 50(3), 463-482.
- Cushman, T. Marz, L. Brower, C. Holahan, K. Boquet, E. (2005). Using focus groups to Assess Writing Center Effectiveness. *The Writing Lab Newsletter*, 29(7), 1-5.
- Flower, L., Hayes, J., Carey, L., Schriver, K., and Stratman, J. (1986). Detection, diagnosis, and the strategies of revision. *College Composition and Communication*, 37(1), 16-55.
- Lerner, N. (2001). Choosing Beans Wisely. *The Writing Lab Newsletter*, 26(1), 1-4.
- Niiler, L. (2003). "The Numbers Speak" Again: A Continued Statistical Analysis of Writing Center Outcomes. *The Writing Lab Newsletter*, 29(5), 13-15.
- North, S. M. (1984). The Idea of a Writing Center. *College English*, 46(5), 433-446.
- Olson, J., Moyer, D., and Falda, A. (2002). Student-Centered Assessment Research in the Writing Center. *Writing Center Research: Extending the Conversation* (Gillespie, P., Gillam, A., Brown, LF. and Stay, B, Ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. 111-132.
- Pemberton, M. A. (1997). Writing Center Ethics: "Do What I Tell You Because You Control Your Own Writing." *The Writing Lab Newsletter*, 22(2), 13-14.
- Salibrici, M. and Levesque, A. (2005). Journal Partnerships: Benefits for Peer Tutors and Professors. *The Writing Lab Newsletter*, 30(4), 1-4.

- Straub, Richard. (1996). The Concept of Control in Teacher Response: Defining the Varieties of “Directive” and “Facilitative” Commentary. *College Composition and Communication*, 47(2), 223-251.
- Suffredini, J. (1998). Defining the tutor’s role and responsibilities in the triangular relationship of the student, professor, and tutor. *The Writing Lab Newsletter*, 22(5), 5-9.
- Thompson, I. (2006). Writing Center Assessment: Why and a Little How. *The Writing Center Journal*, 26(1), 33-61.
- Worcester Polytechnic Institute. (2004). Projects Program. Retrieved April 26, 2006 from <http://www.wpi.edu/Academics/Projects/>
- Worcester Polytechnic Institute. (2005). CCAC Tutoring Services. Retrieved April 27, 2006 from <http://www.wpi.edu/Academics/Depts/HUA/WC/writing.html>
- Zachary, A. (2005). Writing Better Annual Reports. *The Writing Lab Newsletter*, 30(3), 1-6.

APPENDICES

The appendices include transcripts of tutoring sessions, drafts of liaison letters, advisor comments and the model liaison letter.

Appendix A: Transcript of Tutor Meeting

The transcript of the first tutor meeting was analyzed using the methodology described in the section *Coding for Tutoring Transcripts*.

Speaker	Transcript Text	Episode	Initiating Speaker	Aspect of Writing Addressed	Comm Style
Writer	Reads letter aloud. (<37)	---	---	---	---
Tutor	<p>(37) Overall, it sounds really good I like that you guys.... State like, what you guys are doing cause your liaison can see what you are doing then.... I know that's something that happens lot in IQPs, it's between the advisors and liaisons the actual what's going on is changing... I like the questions at the end.</p> <p>One thing that it does seem that its kinda long I know that you don't want to be taking up too much of their time because they take longer to get back to you and sometimes not read it</p> <p>So if you could maybe I was thinking maybe a page, and just cut back maybe on some of that personal information cause its good to have that in there but... at the same time you can learn a lot of that later.</p>	# 1	Tutor	<p>Tutor affirms content in relation to the letter's purpose</p> <p>Tutor addresses content by referring to the length</p>	<p><i>Affirm</i></p> <p><i>Guidir Level .</i></p>
Tutor	44 Overall like the tone is good in itself, professional - the only thing is and I know its there for fun - This is something you guys can decide - is the road trip - because it is the first time that you're talking to them so that's up to you guys, how you guys feel about it, but its important to be professional	# 2	Tutor	Tutor addresses tone in terms of audience	<i>Guidir Level .</i>
Tutor	Letting them know your majors is good because then they can get an idea of you background and what you might already know	# 3	Tutor	Tutor approves content	<i>Affirm</i>
Tutor	Is there anything that you guys have questions about thought about?	# 4	Tutor	Tutor asks a question	<i>Other</i>

Writer	Sometimes we were wondering about the openers, I dunno, we learned in classes, are there too many of them, too...how do they sound, like we can just cut it...	# 5	Writer	Writer addresses sentence style	
Tutor	53 I think I know what you are talking about				
Writer	It is nice but it's unnecessary to be there, like sentence opener like that, they are just extra words...				
Tutor	Yeah those can definitely be taken out because it sounds like...			Tutor agrees with writer	<i>Affirm</i>
Writer	It still sounds good and gets the point across				
Writers	56 Which copy do you want to mark up, I can mark this one there's a word like in there, ya there's a word, I tried to edit when I was reading (Searching for word in document, talking) Everyone talking at once – group discussion about things that are wrong/should be taken out... (Talking to themselves)			Writers affirm and discuss sentence style among themselves	
Tutor	62 How do you guys feel about the rest of it (More discussion)	# 6	Tutor	Tutor asks a question	<i>Other</i>
Tutor	66 I think if you cut down a little bit like	# 7	Tutor	Content	<i>Guidir Level :</i>
Writer	The example they have us was almost two pages long – I thought it was really long	# 8	Writer	Writers question an example regarding format and tutor affirms	
Tutor	Really?				
Writer	Yeah I have it. We weren't exactly sure, how to do it we did it right off that				
Tutor	No that's a good idea				<i>Affirm</i>
Tutor	71 A lot of it too depends on your advisor I know my advisor, he's like when we have him out letter, he doesn't care all this much about you, so take it all out (telling what advisor tutor had and how they are retired, etc)	# 9	Tutor	Tutor describes an experience regarding content	<i>Affirm</i>
Tutor...	75 If you ... we can cut a little bit out...its easier				
Writer	for the liasion to not have to read as much..			Writer/ tutor address content by referring to letter's length	<i>Guidir Level .</i>
...Tutor	Right, a page is enough				
Writer	I know they are excited to hear about you too but...				
Tutor	Not that much				<i>Affirm</i>
Writer	You'd be surprised though				

Tutor	And what about your other letter is it kinda the same thing*	# 10	Tutor	Tutor asks a question	<i>Other</i>
Writers	Yeah it's pretty much identical, the whole middle part is identical... its pretty much the same 79 (Reads part that is different) We had more questions for this one [for the liaisons] (Explaining the group and situation, discussing conference calls, and follow up)			Group discusses a second liaison letter they wrote	
Tutor	A lot of them sometimes get back to you and say here are your answers				
Tutor	94 They both look really good, is there anything with this one? You guys seem focused, like you know a few directions you could possibly go, because at this point you don't really know where you're gonna go so it looks good.	# 11	Tutor	Tutor affirms content	<i>Affirm</i>
Writer	The only question that I had for you – is there usually one standard format for a business letter using the address etc – what kind of thing are we supposed to do to make it look professional	# 12	Writer	Writer questions format	
Tutor	Yeah but technically it not a letter it's an email right			Writers interpret tutor's comment about format	<i>Guidir Level :</i>
Writer	Oh so we don't have to set it in as a letter				
Tutor	I know we didn't do it on ours because it was easier to send an email				
Writer	100 Do we want to do this abbreviation in English or in Spanish because it's different either way. Its something I noticed is not consistent in here. (Discussion about abbreviations)	# 13	Writer	Writers discuss sentence style	
Tutor	106 I think that's good I think they are going to like to hear that if you speak Spanish that will be helpful.			Tutor affirms	<i>Affirm</i>
Writer	So we should probably just shorten it up.	# 14	Writer	Content	<i>Other</i>

*The students had liaison letters for two different sponsors. Because the two letters were very similar, only one was addressed in this study. The advisors did not comment on the drafts of the other letter.

Appendix B: Drafts of Student's Liaison Letters and Advisor Comments

Writers tracked the changes made in the liaison letter with Microsoft Track Changes. The drafts that I collected for this research study include a first draft, a second draft after a tutoring session, two different advisors' comments on the second and third draft and a final draft.

First Draft of the Liaison Letter

COMMUNITY GROUP LETTER

We are the Worcester Polytechnic Institute (WPI) students that will be working to address the issue of community development at the Bosque del Plantío. Our group consists of four WPI juniors, each of which is excited about the work we will be doing in Puerto Rico in the upcoming months. We would like to take this opportunity to tell you a little more about ourselves and to arrange a time to speak with you personally about your goals and intentions for the project.

Alissa is currently in her third year at Worcester Polytechnic Institute. She is a Biology/Biotechnology major, and may minor in both Mathematics and the Spanish language if her time allows. She is an active Student Ambassador, and is the Recruitment Chair for the third Sorority that is currently in the progress of being formed on the campus. She is also a member of the WPI Dance Team and loves the performing arts. Alissa's passions include medicine, Spanish, and working with young girls to help them develop their interests in Science and Engineering. She hopes to some day attend Medical School. Alissa is hardworking and dedicated, and she wishes to indulge herself in the Puerto Rican culture and meet as many locals as she can to help improve her speaking skills.

Christina is currently a junior at WPI studying Biomedical Engineering with a concentration in Tissue Engineering. She is pursuing her life-long dream of going to medical school and becoming a pediatrician. She is a residential advisor in one of the freshman residence halls on campus and really enjoys the job of introducing new students to W.P.I. She also is president of a mentoring group that works with inner city Worcester children each week in order to encourage them to continue their education. She is looking forward to learning more about the Puerto Rican people and their culture.

Ian is majoring in Electrical and Computer Engineering with a minor in English and Philosophy. He works part time for a local Biomedical company, plays guitar, and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Brendan is also a junior at WPI, and is pursuing a major in Actuarial Mathematics with a minor in Management. He is an avid golfer, and is the current President of the WPI Club Golf Team. Brendan believes it is important to maximize the opportunity for extra-curricular fun and involvement, while continuing to strive for high academic standards. As a result, he is an active member a Fraternity on campus, is a member of the WPI Actuarial Club, and participates in a variety of local charity and community service projects. He hopes to apply his abilities and philosophy to the project in Puerto Rico and further grow as an individual.

Our group has begun to identify what we consider to be some of the main issues involved with the project. Clearly, there are several different opinions regarding the proper usage of the Bosque del Plantío. The local communities appear to be facing economic pressure to develop the land in some way. However, there seem to be environmental and cultural reasons that developing this land without oversight would have a negative impact on the area. We hope to work cooperatively with both your group and the Department of Natural Resources and the Environment to develop possible systems of solutions that would allow the Bosque del Plantío to remain both healthy and useful both now and in the future.

We have come across a few areas thus far that require some clarification and additional information. After reviewing the packet of information given to us by our advisors, we noticed that several other studies have already been completed by University of Puerto Rico students and other groups. If possible, we would copies of these studies or relevant contact information so that we may familiarize ourselves with the work that has already been completed on this problem. In this same line of reasoning, we would like to know if there is a particular angle or avenue of study you would like us to focus our efforts upon, such as the inherent legal issues environmental issues, or economic issues. This will help ensure that our work is of the highest value to you when completed and we do not duplicate others efforts.

We would also like to plan a time when we could discuss the project in more detail over the next week via conference call. We will be able to introduce ourselves personally and answer any questions you may have for us. We are available at any of these times: We look forward to hearing from you. Thanks.

Second Draft of the Liaison Letter after Tutoring Session

COMMUNITY GROUP LETTER

We are the Worcester Polytechnic Institute (WPI) students that will be working to address the issue of community development at the Bosque del Plantio. Our group consists of four WPI juniors, each of which is excited about the work we will be doing in Puerto Rico in the upcoming months. We would like to take this opportunity to tell you a little more about ourselves and to arrange a time to speak with you personally about your goals and intentions for the project.

Alissa is currently in her third year at Worcester Polytechnic Institute. She is a Biology/Biotechnology major. She is an active Student Ambassador, and is the Recruitment Chair for the third Sorority that is currently in the progress of being formed on the campus. Alissa's passions include medicine and Spanish. Alissa is hardworking and dedicated, and she wishes to indulge herself in the Puerto Rican culture and meet as many locals as she can to help improve her speaking skills.

Christina is currently a junior at WPI studying Biomedical Engineering. She is pursuing her life-long dream of going to medical school and becoming a pediatrician. She is a residential advisor in one of the freshman residence halls on campus and really enjoys the job of introducing new students to WPI. She is looking forward to learning more about the Puerto Rican people and their culture.

Ian is majoring in Electrical and Computer Engineering with a minor in English and Philosophy. He works part time for a local Biomedical company, plays guitar, and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Brendan is also a junior at WPI, and is pursuing a major in Actuarial Mathematics with a minor in Management. He is the current President of the WPI Club, an active member of a Fraternity on campus, is a member of the WPI Actuarial Club, and participates in a variety of local charity and community service projects. He hopes to apply his abilities and philosophy to the project in Puerto Rico and further grow as an individual.

Our group has begun to identify what we consider to be some of the main issues involved with the project. There are several different opinions regarding the proper usage of the Bosque del Plantio. The local communities appear to be facing economic pressure to develop the land in some way. However, there seem to be environmental and cultural reasons that developing this land without oversight would have a negative impact on the area. We hope to work cooperatively with both your group and the Department of Natural Resources and the Environment to develop possible systems of solutions that would allow the Bosque del Plantio to remain useful both now and in the future.

We have come across a few areas thus far that require some clarification and additional information. After reviewing the packet of information given to us by our advisors, we noticed that several other studies have already been completed by University of Puerto Rico students and other groups. If possible, we would like copies of these studies or relevant contact information so that we may familiarize ourselves with the work that has already been completed on this problem. We would also like to know if there is a particular angle or avenue of study you would like us to focus our efforts upon, such as the inherent legal issues environmental issues, or economic issues. This will help ensure that our work is of the highest value to you when completed and we do not duplicate others efforts.

We would also like to plan a time when we could discuss the project in more detail over the next week via conference call. We will be able to introduce ourselves personally and answer any questions you may have for us. We are available at any of these times: 4 p.m.- 5 p.m. Monday or Wednesday and between 3 p.m. and 5 p.m. Tuesday, Thursday or Friday. We look forward to hearing from you. Thanks.

Deleted: , and may minor in both Mathematics and the Spanish language if her time allows

Deleted: She is also a member of the WPI Dance Team and loves the performing arts.

Deleted: , and working with young girls to help them develop their interests in Science and Engineering

Deleted: She hopes to some day attend Medical School.

Deleted: with a concentration in Tissue Engineering

Deleted: . She also is president of a mentoring group that works with inner city Worcester children each week in order to encourage them to continue their education

Comment [CM1]: Additional words needed for sentence flow

Deleted: is an avid golfer, and

Deleted: Golf Team. Brendan believes it is important to maximize the opportunity for extra-curricular fun and involvement, while continuing to strive for high academic standards. As a result, he is an active member

Comment [CM2]: All deletions in order to shorten letter up as suggested by writing tutor.

Comment [CM3]: Deleted Clearly in order to not sound condescending in the letter suggested by group and writing tutor.

Deleted: Clearly,

Deleted: both healthy and

Deleted: In this same line of reasoning,

Comment [CM4]: Deleted healthy...and in the same line of... because of wordiness both group and writing tutor suggested

Comment [CM5]: Needed times added for liaisons to contact us. Group decision

It is important to note that Microsoft Track Changes will identify any change made to the original draft. In some cases, the additions and deletions identified by Microsoft Word were adding punctuation or words to make sentences flow after deleting content from the letter. These changes occurred because of another change, and but were still noted in the classification of the transcript. For each addition and deletion, I identified the aspect of writing as well as who initiated that change in the text. The following table shows the coding for each addition and deletion in Draft 2.

Reference	Problem or Issue Addressed	Influences on Revision
Deletion 1-8	Content	Tutor suggested, Guiding Level 3
Additions 1-2	Sentence Style For sentence flow (word additions) [after deleting sections of letter]	Writer only
Deletion 9	Improve tone (Tone was condescending)	Writer only
Addition 3	Punctuation (capitalization) [Result of Deletion 9]	Writer only
Addition 4	Sentence Style	Writer only [Noticed while reading out loud at tutor session]
Deletions 10-11	Sentence Style (Remove wordiness)	Writer suggested, tutor affirms
Addition 5	Punctuation (capitalization) [Result of Deletion 11]	Writer only
Addition 6	Sentence Style For sentence flow (word additions) [after deleting sections of letter]	Writer only
Addition 6	Content	Writer only

Advisor 1 Comments on Second Draft of the Liaison Letter

COMMUNITY GROUP LETTER

We are the Worcester Polytechnic Institute (WPI) students that will be working to address the issue of community development at the Bosque del Plantío. Our group consists of four WPI juniors, each of which is excited about the work we will be doing in Puerto Rico in the upcoming months. We would like to take this opportunity to tell you a little more about ourselves and to arrange a time to speak with you personally about your goals and intentions for the project.

Alissa is currently in her third year at Worcester Polytechnic Institute. She is a Biology/Biotechnology major. She is an active Student Ambassador, and is the Recruitment Chair for the third Sorority that is currently in the progress of being formed on the campus. Alissa's passions include medicine and Spanish. Alissa is hardworking and dedicated, and she wishes to indulge herself in the Puerto Rican culture and meet as many locals as she can to help improve her speaking skills.

Christina is currently a junior at WPI studying Biomedical Engineering. She is pursuing her life-long dream of going to medical school and becoming a pediatrician. She is a residential advisor in one of the freshman residence halls on campus and really enjoys the job of introducing new students to WPI. She is looking forward to learning more about the Puerto Rican people and their culture.

Ian is majoring in Electrical and Computer Engineering with a minor in English and Philosophy. He works part time for a local Biomedical company, plays guitar, and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Brendan is also a junior at WPI, and is pursuing a major in Actuarial Mathematics with a minor in Management. He is the current President of the WPI Club, an active member of a Fraternity on campus, is a member of the WPI Actuarial Club, and participates in a variety of local charity and community service projects. He hopes to apply his abilities and philosophy to the project in Puerto Rico and further grow as an individual.

Our group has begun to identify what we consider to be some of the main issues involved with the project. There are several different opinions regarding the proper usage of the Bosque del Plantío. The local communities appear to be facing economic pressure to develop the land in some way. However, there seem to be environmental and cultural reasons that developing this land without oversight would have a negative impact on the area. We hope to work cooperatively with both your group and the Department of Natural Resources and the Environment to develop possible systems of solutions that would allow the Bosque del Plantío to remain useful both now and in the future.

We have come across a few areas thus far that require some clarification and additional information. After reviewing the packet of information given to us by our advisors, we noticed that several other studies have already been completed by University of Puerto Rico students and other groups. If possible, we would like copies of these studies or relevant contact information so that we may familiarize ourselves with the work that has already been completed on this problem. We would also like to know if there is a particular angle or avenue of study you would like us to focus our efforts upon, such as the inherent legal issues environmental issues, or economic issues. This will help ensure that our work is of the highest value to you when completed and we do not duplicate others efforts.

We would also like to plan a time when we could discuss the project in more detail over the next week via conference call. We will be able to introduce ourselves personally and answer any questions you may have for us. We are available at any of these times: 4 p.m. - 5 p.m. Monday or Wednesday or between 3 p.m. and 5 p.m. Tuesday, Thursday or Friday. We look forward to hearing from you. Thanks.

Comment [a6]: Shouldn't you have a heading here - date, address, salutation - a formal letter?
{FORMAT} <Guiding Level 4>

Comment [a7]: I prefer people to be referred to as "who" not "that." Humor me on this one.
{GRAMMAR} <Guiding Level 4>

Comment [S8]:
{PUNCTUATION} <Guiding Level 4>
(Advisor changed spelling of word)

Comment [a9]: Wrong word. People are never referred to as "which." Try "whom" here.
{GRAMMAR} <Guiding Level 4>

Deleted: i

Comment [a10]: Try to find a better word.
{TONE} <Guiding Level 3>

Comment [a11]: Good. I like this. Shows humor and personality.
{CONTENT} <Affirming>

Comment [a12]: Is this the best word?
{SENTENCE STYLE} <Guiding Level 1>

Comment [a13]: Either use others' or say the efforts of others. {GRAMMAR} <Guiding Level 3>

Comment [a14]: on
{GRAMMAR} <Guiding Level 4>

Comment [a15]: on
{GRAMMAR} <Guiding Level 4>

Comment [a16]: These are minor comments. Good job overall. I only commented on this letter as the other is essentially the same.
{CONTENT} <Affirming>

Advisor 2 Comments on Second Draft of the Liaison Letter

COMMUNITY GROUP LETTER

We are the Worcester Polytechnic Institute (WPI) students that will be working to address the issue of community development at the Bosque del Plantío. Our group consists of four WPI juniors, each of which is excited about the work we will be doing in Puerto Rico in the upcoming months. We would like to take this opportunity to tell you a little more about ourselves and to arrange a time to speak with you personally about your goals and intentions for the project.

Alissa is currently in her third year at Worcester Polytechnic Institute. She is a Biology/Biotechnology major. She is an active Student Ambassador, and is the Recruitment Chair for the third Sorority that is currently in the progress of being formed on the campus. Alissa's passions include medicine and Spanish. Alissa is hardworking and dedicated, and she wishes to indulge herself in the Puerto Rican culture and meet as many locals as she can to help improve her speaking skills.

Christina is currently a junior at WPI studying Biomedical Engineering. She is pursuing her life-long dream of going to medical school and becoming a pediatrician. She is a residential advisor in one of the freshman residence halls on campus and really enjoys the job of introducing new students to WPI. She is looking forward to learning more about the Puerto Rican people and their culture.

Ian is majoring in Electrical and Computer Engineering with a minor in English and Philosophy. He works part time for a local Biomedical company, plays guitar, and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Brendan is also a junior at WPI and is pursuing a major in Actuarial Mathematics with a minor in Management. He is the current President of the WPI Club, an active member of a Fraternity on campus, is a member of the WPI Actuarial Club, and participates in a variety of local charity and community service projects. He hopes to apply his abilities and philosophy to the project in Puerto Rico and further grow as an individual.

Our group has begun to identify what we consider to be some of the main issues involved with the project. There are several different opinions regarding the proper usage of the Bosque del Plantío. The local communities appear to be facing economic pressure to develop the land in some way. However, there seem to be environmental and cultural reasons that developing this land without oversight would have a negative impact on the area. We hope to work cooperatively with both your group and the Department of Natural Resources and the Environment to develop possible systems of solutions that would allow the Bosque del Plantío to remain useful both now and in the future.

We have come across a few areas thus far that require some clarification and additional information. After reviewing the packet of information given to us by our advisors, we noticed that several other studies have already been completed by University of Puerto Rico students and other groups. If possible, we would like copies of these studies or relevant contact information so that we may familiarize ourselves with the work that has already been completed on this problem. We would also like to know if there is a particular angle or avenue of study you would like us to focus our efforts upon, such as the inherent legal issues, environmental issues, or economic issues. This will help ensure that our work is of the highest value to you when completed and we do not duplicate others efforts.

We would also like to plan a time when we could discuss the project in more detail over the next week via conference call. We will be able to introduce ourselves personally and answer any questions you may have for us. We are available at any of these times: 4 p.m. - 5 p.m. Monday or Wednesday or between 3 p.m. and 5 p.m. Tuesday, Thursday or Friday. We look forward to hearing from you. Thanks.

Comment [u17]: This is not written as a business letter. Please reformat this document so that it is like a business letter.
[FORMAT] <Guiding Level 3>

Comment [u18]: What kind of a pronoun should you use to refer to people?
[GRAMMAR] <Guiding Level 2>

Comment [S19]:
[PUNCTUATION] <Guiding Level 4>
(Advisor changed spelling of word)

Comment [u20]: See comment 2 again.
[GRAMMAR] <Guiding Level 2>

Deleted: i

Comment [u21]: This is not likely to information that is very interesting for the liaisons, as they know don't know about sororities in all likelihood. The rest is OK.
[CONTENT] <Guiding Level 2>

Comment [u22]: I think you can leave this out as not very useful at this time. You need to provide just a bit about each student that may be relevant for the liaisons to know.
[CONTENT] <Guiding Level 3>

Comment [u23]: I would drop this. I believe you are trying to be funny, but the liaisons may not get the humor (cross-cultural issue) so it is best in this type of letter to avoid humor.
[TONE] <Guiding Level 4>

Comment [u24]: I would drop out this info as not very relevant or useful for the liaisons to know. Rewrite the sentence to focus just on the charity and community service work.
[CONTENT] <Guiding Level 4>

Comment [u25]: Not sure what this means; try rewording this.
[SENTENCE STYLE] <Guiding Level 3>

Comment [u26]: Looks like you forgot a comma here.
[PUNCTUATION] <Guiding Level 4>

Comment [u27]: make this into a new sentence. The existing sentence is too long.
[SENTENCE STYLE] <Guiding Level 4>

Comment [u28]: I suggest you just mention a telephone call, because the conference part is really only at your end. I believe there will be only one person talking to you from the PR end, ur ... [1]

Comment [u29]: You need to indicate whether these times are WPI time or PR time. I suggest you use PR times to avoid confusion. ... [2]

Third Draft of the Liaison Letter after Receiving Advisors' Comments

January 22, 2006

Wanda Crespo
Ciudadanos pro Bosque del Plantío

Dear Mrs. Crespo,

We are the Worcester Polytechnic Institute (WPI) students who will be working to address the issue of community development at the Bosque del Plantío. Our group consists of four WPI juniors, each of whom is excited about the work we will be doing in Puerto Rico in the upcoming months. We would like to take this opportunity to tell you a little more about ourselves and to arrange a time to speak with you personally about your goals and intentions for the project.

Alissa is currently in her third year at Worcester Polytechnic Institute. She is a Biology/Biotechnology major. She is an active Student Ambassador. Alissa's passions include medicine and Spanish. Alissa is hardworking and dedicated, and she wishes to indulge herself in the Puerto Rican culture and meet as many locals as she can to help improve her speaking skills.

Christina is currently a junior at WPI studying Biomedical Engineering. She is pursuing her life-long dream of going to medical school and becoming a pediatrician. She is looking forward to learning more about the Puerto Rican people and their culture.

Ian is majoring in Electrical and Computer Engineering with a minor in English and Philosophy. He works part time for a local Biomedical company, plays guitar as well.

Brendan is also a junior at WPI and is pursuing a major in Actuarial Mathematics with a minor in Management. He participates in a variety of local charity and community service projects. He hopes to apply his abilities and philosophy to the project in Puerto Rico and further grow as an individual.

Our group has begun to identify what we consider to be some of the main issues involved with the project. There are several different opinions regarding the proper usage of the Bosque del Plantío. The local communities appear to be facing economic pressure to develop the land in some way. However, there seem to be environmental and cultural reasons that developing this land without oversight would have a negative impact on the area. We hope to work cooperatively with both your group and the Department of Natural Resources and the Environment to develop possible solutions that would allow the Bosque del Plantío to remain useful both now and in the future.

We have come across a few areas thus far that require some clarification and additional information. After reviewing the packet of information given to us by our advisors, we noticed that several other studies have already been completed by University of Puerto Rico students and other groups. If possible, we would like copies of these studies or relevant contact information so that we may familiarize ourselves with the work that has already been completed on this problem. We would also like to know if there is a particular angle or avenue of study you would like us to focus our efforts upon, such as the inherent legal issues, environmental issues, or economic issues. This will help ensure that our work is of the highest value to you when completed.

We would also like to plan a time when we could discuss the project in more detail over the next week via a telephone call. We will be able to introduce ourselves personally and answer any questions you may have for us. We are available at any of these times: 5 p.m. - 6 p.m. on Monday or between 4 p.m. and 6 p.m. Tuesday, Thursday or Friday (Puerto Rico time). We look forward to hearing from you. Thanks.

Deleted: COMMUNITY GROUP LETTER¶

Comment [CM30]: Business letter form needed as stated by advisors

Comment [CM31]: Change from which to whom due to comment on how to refer to people by ad

Deleted: hich i

Comment [CM32]: Changed reference to people, suggested by advisors

Deleted: , and is the Recruitment Chair for the third Sorority that is currently in the progress of being formed on the campus.

Deleted: . She is a residential advisor in one of the freshman residence halls on campus and really enjoys the job of introducing new students to WPI.

Deleted: , and believes that any problem that cannot be solved through a concerted effort can best be ignored by taking a road trip.

Deleted: is the current President of the WPI Club, an active member of a Fraternity on campus, is a member of the WPI Actuarial Club, and

Comment [CM33]: All previous deletions were made to shorten letter as suggested by advisors

Comment [CM34]: Changed because of strange wording, suggested by advisors

Deleted: systems of

Deleted: confere

Deleted: 4

Deleted: 5

Deleted: or Wednesday

Deleted: 3

Deleted: 5

Comment [CM35]: Times changed to Puerto Rico time as suggested by advisors

The following table shows the coding for each addition and deletion in Draft 3.

Reference	Problem or Issue Addressed	Influences on Revision
Deletion 1	Format	Advisor requested, Guiding Level 3, 4
Addition 1	Format	Advisor requested, Guiding Level 3, 4
Additions 2-3	Grammar	Advisor requested, Guiding Level 4
Deletion 2	Grammar [Result of Addition 3]	Advisor requested, Guiding Level 4
Deletion 3-6	Content	Advisor requested, Guiding Level 3, 4
Deletion 7	Sentence Style	Advisor requested, Guiding Level 3
Addition 4	Sentence Style (Word Additions) [Result of deleting sections of the letter]	Writer only
Addition 5	Sentence Style	Advisor Requested, Guiding Level 2
Deletion 8	Sentence Style [Result of Addition 5]	Writer only
Addition 6	Sentence Style	Advisor Requested, Guiding Level 4
Deletion 9-13	Sentence Style [Result of Addition 6]	Advisor requested, guiding Level 2
Addition 7	Sentence Style	Advisor requested, Guiding Level 3

Final Draft of the Liaison Letter

January 23, 2006

Wanda Crespo
Ciudadanos pro Bosque del Plantío
A-56 Villa Granada
Urb. El Plantío
Toa Baja, P.R. 00949

Dear Mrs. Crespo,

We are the Worcester Polytechnic Institute (WPI) students who will be working to address the issue of community development at the Bosque del Plantío. Our group consists of four WPI juniors, each of whom is excited about the work we will be doing in Puerto Rico in the upcoming months. We would like to take this opportunity to tell you a little more about ourselves and to arrange a time to speak with you personally about your goals and intentions for the project.

Alissa is currently in her third year at Worcester Polytechnic Institute. She is a Biology/Biotechnology major. She is an active Student Ambassador as well. Alissa's passions include medicine and Spanish. Alissa is hardworking and dedicated, and she wishes to assimilate herself in the Puerto Rican culture and meet as many locals as she can to help improve her speaking skills.

Christina is currently a junior at WPI studying Biomedical Engineering. She is pursuing her life-long dream of going to medical school and becoming a pediatrician. She is looking forward to learning more about the Puerto Rican people and their culture.

Ian is majoring in Electrical and Computer Engineering with a minor in English and Philosophy. He works part time for a local Biomedical company and also plays guitar.

Brendan is also a junior at WPI and is pursuing a major in Actuarial Mathematics with a minor in Management. He participates in a variety of local charity and community service projects. He hopes to apply his abilities and philosophy to the project in Puerto Rico and further grow as an individual.

Our group has begun to identify what we consider to be some of the main issues involved with the project. There are several different opinions regarding the proper usage of the Bosque del Plantío. The local communities appear to be facing economic pressure to allow the land to be developed the land in some way. However, there seem to be environmental and cultural reasons that developing this land without oversight would have a negative impact on the area. We hope to work cooperatively with both your group and the Department of Natural Resources and the Environment to develop possible solutions that would allow the Bosque del Plantío to remain valuable both now and in the future.

We have come across a few areas thus far that require some clarification and additional information. After reviewing the packet of information given to us by our advisors, we noticed that several other studies have already been completed by University of Puerto Rico students and other groups. If possible, we would like copies of these studies or relevant contact information so that we may familiarize ourselves with the work that has already been completed on this problem. We would also like to know if there is a particular angle or avenue of study you would like us to focus our efforts upon, such as the inherent legal issues, environmental issues, or economic issues. This will help ensure that our work is of the highest value to you when completed.

We would also like to plan a time when we could discuss the project in more detail over the next week via a telephone call. We will be able to introduce ourselves personally and answer any questions you may have for us. We are available at any of these times: 5 p.m. - 6 p.m. on Monday or between 4 p.m. and 6 p.m. on Tuesday, Thursday or Friday (Puerto Rico time). We look forward to hearing from you. Thanks.

Model Liaison Letter

Date: Fri, 30 Jan 2004 16:07:36 +1100
To: <chris.krishna-pillay@csiro.au>
Subject: CSIRO Education - Greetings from WPI

January 25, 2004

Chris Krishna-Pillay, Manager
CSIRO Education
PO Box 56
Highett, Victoria 3190, Australia

Dear Mr. Krishna-Pillay,

We are the group of Worcester Polytechnic Institute (WPI) students who will have the pleasure of working on a project that will discover the feasibility of a partial or total web delivery of your educational programs. There are three of us in the group which will be working on your project. We are all juniors here at WPI and are motivated to get this job done and look forward to meeting you and getting to know you as we work together to achieve our common goal.

One of the members of our group, Sean Doherty, is a Computer Science Major with a Spanish minor. He is a member of many student organizations on campus such as the Christian Bible Fellowship and the Student Alumni Society, as well as being a senator and assistant treasurer in the Student Government Association. He loves to travel and has visited much of Europe while on project at WPI as well as participating in a mission trip in Honduras. He loves sports as well and along with being a fan of all sports is a member of the Rugby and Lacrosse teams and also plays intramural basketball. He is excited to try Australian-rules football and to go SCUBA diving during his trip.

Rick Adams is a junior at WPI who is majoring in Mechanical Engineering with a concentration in Aerospace, and his minor is Management. He has played hockey his entire life and is currently playing on the club hockey team for WPI. Although hockey is the only sport he plays for WPI, he enjoys participating in just about any sport possible. He created his own website that talks a little more about him and also contains a photograph. His website is located at <http://www.geocities.com/slapsh0t682003/techie> <<http://www.geocities.com/slapsh0t682003/techie>>.

Anthony Smith is pursuing a degree in Electrical and Computer Engineering with a minor in Management. He not only works hard academically, but also enjoys several other activities on campus. He is an active brother in the Fraternity of Phi Gamma Delta, and works at the Campus Center Information Desk, helping people there in any way possible. His greatest passion is the martial arts. He has a second-degree black belt in Tae Kwon Do, and on campus he teaches a self-defense class and performs several martial arts demonstrations each year. So far, we feel that one of the main issues that is present with your current programs are that you would like to take advantage of new technologies to better serve the public. Another possible issue is

that CSIRO would like to reach more people than they currently do. We would love to hear any more guidance you could give in order to get this project going before coming to Australia. We want to work to improve the delivery of your educational programs in any way possible and see that you use the web in whatever capacity will help you the most.

We have some questions as to the specifics of the project. In the information provided us by our advisors, it stated that you want to pursue electronic methods of delivering your education programs, and we wondered if this was limited to the Internet. What do you think are the shortcomings of your program that a web based system would solve or improve? Also, we wondered exactly how you do things now, specifically what our suggestions would replace. We would like to know if you want us to find ways to lower the cost of your programs or just to see if this alternate delivery would improve the quality of learning in the your educational programs. From reading previous projects done with your company, we have noticed that participation with your program is mainly concentrated in urban areas, specifically Melbourne.

We would like to schedule a time when we could discuss these questions and introduce ourselves to you. The best time for us to talk via conference call is from 8-9am on Tuesday, Melbourne time (4-5pm on Monday our time). Thank you, and we hope to hear from you soon.

Page 57: [1] Comment [u28]

user

2/19/2007 1:22:00 PM

I suggest you just mention a telephone call, because the conference part is really only at your end. I believe there will be only one person talking to you from the PR end, unless they also have a speaker phone. You might ask them if they have a speaker phone, as it would enable you to hear from more than one person when you call them.

{SENTENCE STYLE} <Guiding Level 2>

Page 57: [2] Comment [u29]

user

2/19/2007 1:22:00 PM

You need to indicate whether these times are WPI time or PR time. I suggest you use PR times to avoid confusion.

{SENTENCE STYLE} <Guiding Level 3>