AC 2009-408: HOW AND TO WHAT EXTENT DOES A SERVICE-LEARNING PEDAGOGY ENHANCE COMMUNICATION AND COLLABORATIVE SKILL LEARNING AMONG FIRST-YEAR STUDENTS?

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Introduction

All engineering students at our institution are required to take a course in speech. Some of the student learning outcomes for the course relate to the learning outcomes identified in category 3 of the Accreditation Board of Engineering and Technology (ABET) accreditation requirements (2001) [1]. Specifically, ABET expects that "Engineering programs must demonstrate that their students attain the following outcomes: Category 3(d) an ability to function on multi-disciplinary teams and… (g) an ability to communicate effectively". In this study, we examine the gains in communication and team skills in different sections of a required speech course. The students enrolled in these sections are primarily freshmen. Most of them are engineering and aviation majors. The course is taught by different instructors using the same textbook and syllabus. Three of these sections included a service-learning component. This paper examines whether the course achieves the ABET 3(d) and 3 (g) objectives from the students' perspective. We also look at the similarities and differences between the sections utilizing service-learning and those that use other pedagogies.

Review of Literature

This paper grew out of an assessment project focusing on the basic speech course. To frame the assessment process, two the paradigms of assessment were identified by Ewell [2]. While we set to provide information to instructors and administrators for the purpose of continuous improvement, it was possible the results could also be used to address accountability. The overall assessment plan included direct and indirect measures gathered as formative and summative assessments using quantitative and qualitative assessments [3]. The portion of the plan presented in this paper is a quantitative, indirect assessment used as a pretest and posttest. We recognized the importance of alignment [4] and examined the university's mission, the general education goals, and the student learning outcomes for the course. The instrument used in this study was developed to align with the course outcomes and the course content. Evaluation forms used by the instructor, the student for her/his own reflection, peers, and audience members were developed to reflect the same criteria. The instrument reported on in this paper reflects student perceptions on criteria that were reinforced throughout the course.

While the literature in communication indicates that assessment is an important component of the basic course, no specific measures were identified for assessment [5]. Because we were interested in service-learning as a variable we investigated how assessment had been conducted for service-learning in communication. Many respondents in a survey reported that student activity reports and/or site supervisor evaluations were used to assess learning [6]. While the qualitative data provided from measures such as those can be very useful to the instructor, the findings make comparisons difficult. Neither the literature from communication or service-learning indicated a standardized instrument was used for assessment. To address this gap we developed a theoretical framework and methods using discipline-defined criteria to assess learning in communication [7]-[9]. We employed a survey used as a pre-test and post-test self-

report measure to give evidence of change in the skills expected for students who have completed one college speech course. The changes reported by the students from the pre-test to the post-test would provide evidence that students were making gains in attaining the abilities to effectively communicate and to function in multi-disciplinary teams.

The basic speech course in this study is intended for first year students. We expect the students to gain competencies in these areas:

1. Demonstrate increased abilities in speech, personal communication, and career communication.
2. Demonstrate the presentation of speeches to inform and to persuade (to convince, to activate).
3. Lead or participate in group discussions reaching problem-solving or fact-finding goals, and respond to comments and questions from the audience while maintaining objectivity.
4. Maintain group cohesiveness by using task and maintenance behaviors (including recording and analyzing your group uses of these group dynamic actions.)
5. Use informative, persuasive, and empathetic listening strategies and write journal entries or reports that describe the results.

These learning outcomes align well with the ABET 3(d) and 3(g) objectives. Some sections of this course have a service-learning component. Bringle and Hatcher (1995) defined service-learning as a:

> credit-bearing educational experience in which students (a) participate in an organized service activity in such a way that meets identified community needs, and (b) reflect on the service activity in such a way to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility (p. 112) [10].

Service-learning pedagogy has theoretical underpinning in experiential learning. Experiential learning is a philosophy of education based on what Dewey (1938) called a "theory of experience" [11]. He argued that while traditional education had little need for theory since practice was determined by tradition, the new experiential approach to education did need a sound theory of experience to guide its conduct. Kolb and Kolb (2005) described a more updated view of experiential learning theory including concrete experience and abstract conceptualization [12]. Implementation of service-learning involves abstract conceptualization, active experimentation, and reflective observations. Students gain concrete experience through these service-learning projects.

The American Psychological Association (APA) described fourteen psychological principles pertaining to the learner and the learning process [13]. Service-learning aligns particularly well with the principles of learning being goal-directed, involving strategic thinking, incorporating social influences, along with motivational and emotional influences. From a cognitive learning perspective, learning advances through a stepwise sequence of knowledge, comprehension, application, analysis, synthesis and evaluation [14]. As compared to most other pedagogy such as didactic instructions, homework assignments and papers, service-learning is

more likely to require application, analysis, synthesis, and even evaluation. Service-learning pedagogy is suited to how people learn.

The form of service-learning examined in this paper involves peer tutoring or peer assisted learning. Research in peer education indicates increases in knowledge and in attitudes toward subject matter [15], personal and social benefits [16], communication and interpersonal skills [17]. Younger students may benefit through peer tutoring by developing mastery of basic skills, becoming aware of career and vocational education, and developing interpersonal relations and/or valuing people from groups other than one's own [18].

Service-learning is a relatively common pedagogy in engineering. One reason for its popularity is the industry's desire for well-rounded individuals with the communication and collaboration skills who are better equipped for working in a global context [19]. Service-learning provides a platform to gain these competencies. Campus Compact lists several programs in its service-learning resources for engineering [20]. Engineering students engaged in service-learning develop attributes desired by employers such as having an understanding of the social context and issues related to the problems they are solving, critical thinking skills, ethical standards, communication skills, an understanding of teamwork, and curiosity [21]. This study looks at communication and teamwork skills.

We appreciate that different pedagogies can be employed to achieve the end of students attaining course outcomes. Since engineering students often take only the required courses in communication, we were curious whether and to what extent service-learning produced changes relative to other pedagogies. We chose a survey because it would provide information about the experiences of students in across course sections, and it would yield ratings that would provide quantitative indications of progress, which is consistent with what the literature suggests for survey use [3]. We tested the survey over 3 semesters with different groups of students (n=128) to exclude questions that were unclear and to modify items so as to improve the measure. We followed the guidelines identified by Allen [4]. We recognize the limitations of surveys, yet we felt the measure was appropriate for our purposes. A high correspondence exists between the items included in the survey and the material covered in the course. The students were aware they would be evaluated on content, organization, and delivery of their speeches as well as on their team skills and personal skills. These elements were reinforced through instructor evaluation forms, self evaluation reflections, peer evaluations, and audience feedback.

The instrument in this study was primarily based on the competencies in communication and collaboration skills described by Morreale, Rubin and Jones [22] which was posted on the National Communication Association (NCA) website. It formed the basis of NCA's expectations for students who have taken one college speech course. We selected items from the extensive list of competencies that were best suited for the speech course taught at our institution. To add in a practitioner perspective to that of educators, we supplemented the instrument with items from the Commission on Public Relations Education 2006 report [23]. The instrument included 57-items grouped under five factors [Appendix A]. Eleven items pertained to content of the speech. Seven items applied to speech organization and 7 to delivery. Seventeen team-skills items were selected as well as 15 personal skills items. These five-factors as a composite measure addresses the five course learning outcomes identified above. It also

addresses ABET's 3(d) criteria of demonstrating the ability to function on multi-disciplinary teams and 3(g) criteria of demonstrating the ability to communicate effectively.

In this study, we raised the following questions:

Q_1: Is there a difference between pre-test and post-test for all students in the course?
Q_2: Is there a difference between results from students in service-learning sections and results from students in sections using other pedagogies?
Q_3: What impact did service-learning have on student learning?

Method

All students in this study were enrolled in different sections of the speech course required by a 4-year university specializing in engineering and aviation. Eight sections were offered during the fall semester of the 2008– 2009 school year to accommodate the number of students. Seven sections were included in this study. The eighth section was not included because it was taught by a newly hired adjunct.

The students in this study were relatively homogenous representing engineering and aviation majors primarily. Most students were in their first year of study. They were not informed of the pedagogies to be used when they enrolled in the sections. Three of the sections involved a service-learning component (n=17, 19, and 18) and four sections were taught using other pedagogies (n=16, 12, 13, and 17). The three sections of service-learning were taught by one instructor while the other non-service learning sections were taught by three other instructors. All instructors had taught the course before and all were deemed experienced and competent. Instructors of all sections used a common syllabus and the same textbook.

The service-learning project was developed as part of an ongoing collaboration between the university and the NASA Educator Resource Center (ERC) [24]. In the three service-learning sections, students worked in teams to create and deliver presentations for family science programs on topics of air science, flight science, or rocket science. The ERC representative came to classes and introduced the topics. Each class was assigned a topic and each group had to develop a presentation that fit within that topic. They discussed presentation ideas with the ERC representative. Teams developed their presentations and rehearsed to the ERC and the instructor a week before presenting to the families participating in the programs. After the rehearsals, students received feedback on their individual presentations. A week later they delivered their presentations to participants in the family science program.

Students in the four non-service learning sections engaged in other group projects. None of those projects required presentations to an outside audience. The comparison between sections incorporating service-learning and those that did not would provide indications of what, if any, differences resulted from the different pedagogies and whether all pedagogies resulted in evidence that the students in all courses met the outcomes addressed by this assessment.

To isolate treatment effect from group differences, we used a repeated-measure approach using a pre-test post test construct, and measured the differences at the beginning and at the end of the semester. The self-assessment quantitative instrument (Appendix A) addressed three categories essential to public speaking, namely content, organization, and delivery. These are learning outcomes expected by NCA as well as by ABET 3(g). The survey also addressed team skills and personal skills, which were included in the expectations stated by NCA, the Commission on Public Relations Education, and which address ABET's 3(d) criteria of being able to function in multi-disciplinary teams.

To answer the first research question, we gathered the survey data from all students at the beginning and at the end of the semester. The inclusion criterion was that students answer both the pre-test and post-test surveys. The criteria yielded 112 valid sets of responses used in the data analysis. By tracking the changes reported by each student in a repeated measure MANOVA, we looked for evidence of significant changes in these five factors as an omnibus test. For the second research question, we segregated the data of seven groups into a service-learning subset (treatment group, n=54) and a non-service-learning subset (control group, n=58) and performed the same repeated measure MANOVA analysis to investigate the treatment effect without being influenced by group differences. To answer the third research question, we used both the quantitative data from the second research question and reflective comments made by students in the treatment group to look for themes that might explain any difference noted in the quantitative analysis.

Results

The first research question pertains to whether the course has significant effect on the public speaking factors, the team skills factor, and the personal traits factor. For all seven sections of speech classes (n=112), gains were seen in the means of all five factors between the beginning of the semester (pre-test) and the end of the semester (post-test). The group difference examined under repeated-measure MANOVA was also significant (Wilks' lambda = .346, significance <.001). The combination of sample size and effect size was credible (power = 1). The 5-factor construct was also sufficiently robust (partial eta square = 0.654). To further examine which of the 5 factors were responsible for the overall difference observed, a univariate contrast was performed. All five factors were significant (significance<.001) after making Bonferronic adjustments. These results (Table 1) address the first research question and indicate that students in all seven sections of the course reported significant achievement of the outcomes included in the analysis. These results offer evidence of achievement in the two areas identified by ABET as defined in this study across all sections.

Table 1
Self-Assessed Competencies at Beginning and End of Communications Course
(Seven sections, n=112)

Factors	Pre-test M (SD)	Post-test M (SD)
Content	3.516 (0.483)	4.136 (0.467)
Organization	3.364 (0.595)	3.973 (0.544)
Delivery	3.288 (0.726)	3.922 (0.627)

Team Skills	3.702 (0.454)	4.139 (0.532)
Personal Skills	3.949 (0.470)	4.302 (0.443)

	Wilks' Lambda	Significance	Partial Eta Squared	Power
MANOVA	0.346	0.000	0.654	1.000

Contrast	f 1,111	Significance	Partial Eta Squared	Power
Content	172.327	0.000	0.608	1.000
Organization	135.435	0.000	0.550	1.000
Delivery	105.695	0.000	0.488	1.000
Team Skills	83.573	0.000	0.430	1.000
Personal Skills	84.765	0.000	0.433	1.000

For our second research question on whether a significant difference existed between service-learning and other pedagogies on the five areas, we performed a similar analysis for both the service-learning subset and the non-service-learning subset.

Table 2
Self-Assessed Competencies at Beginning and End of Communications Course
(Three Sections with Service-learning, n=54)

Factors	Pre-test M (SD)	Post-test M (SD)
Content	3.463 (0.537)	4.139 (0.466)
Organization	3.228 (0.577)	3.925 (0.530)
Delivery	3.172 (0.683)	3.857 (0.563)
Team Skills	3.617 (0.494)	4.161 (0.499)
Personal Skills	3.925 (0.522)	4.311 (0.460)

	Wilks' Lambda	Significance	Partial Eta Squared	Power
MANOVA	0.239	0.000	0.761	1.000

Contrast	f 1,53	Significance	Partial Eta Squared	Power
Content	93.608	0.000	0.638	1.000
Organization	129.441	0.000	0.709	1.000
Delivery	58.020	0.000	0.523	1.000
Team Skills	66.634	0.000	0.557	1.000
Personal Skills	45.555	0.000	0.462	1.000

The statistics of the service-learning sections (Table 2) were quite similar to that of all sections combined. Significant changes were seen in the repeated-measure MANOVA and all factors were significant contributors to the overall change. Likewise, we performed an analysis

of the non-service learning sections (Table 3). This subset also showed a significant change between the beginning and the end of the semester. Apparently the pedagogical approaches used by all instructors were effective in addressing the areas included in this measure. The service-learning group, however, might have a stronger treatment effect based on the changes of the means. The changes in the means were higher in the service-learning subset for each of the five factors. Likewise, the partial eta-squared calculations for each of the five factors were also higher in the service-learning group, indicating that the specific treatment has stronger effects on the overall outcome that the non-service learning subset.

Table 3
Self-Assessed Competencies at Beginning and End of Communications Course
(Four Sections without Service-learning, n=58)

Factors	Pre-test M (SD)	Post-test M (SD)
Content	3.566 (0.424)	4.133 (0.473)
Organization	3.490 (0.588)	4.017 (0.557)
Delivery	3.397 (0.753)	3.982 (0.680)
Team Skills	3.782 (0.402)	4.118 (0.565)
Personal Skills	3.972 (0.418)	4.294 (0.432)

	Wilks' Lambda	Significance	Partial Eta Squared	Power
MANOVA	0.362	0.000	0.638	1.000

Contrast	f 1,57	Significance	Partial Eta Squared	Power
Content	79.368	0.000	0.582	1.000
Organization	40.825	0.000	0.417	1.000
Delivery	47.666	0.000	0.455	1.000
Team Skills	25.924	0.000	0.313	1.000
Personal Skills	39.026	0.000	0.406	1.000

To further explore the difference in outcome with the two pedagogies, we analyzed the gains in each factor in the same multivariate construct using pedagogy as a dependent variable. The result is not statistically significant as an omnibus MANOVA test (Wilks' lambda = .946, significance =0.310) although univariate comparisons showed more substantial difference in the gains in Team Skills factor (significance=0.028). The results are shown in Table 4.

Table 4
Univariate Contrast for Difference in Gains Between Service-Learning and Other Pedagogies
(Seven sections, n=112)

Parameter	Significance	Partial Eta Squared
Difference in gains in Content	.254	.012
Difference in gains in Organization	.105	.024
Difference in gains in Delivery	.419	.006

Difference in gains in Team Skills	.028	.043
Difference in gains in Personal Skills	.400	.006

In this analysis, our findings were consistent with the literature that service-learning can be beneficial in building team skills. Had the study focused on the team skills alone without the other factors, results may have shown a significant group difference between the service-learning and non-service learning pedagogies.

To increase our understanding of what the impact of service-learning was on student learning, we collected qualitative data by the means of reflective responses. Reflection is considered an integral component of service-learning [25-26]. Of the nine prompting questions posed to provide some structure to the students' reflective comments about their service-learning experience, two questions pertained to the third research question:

> What are your reactions to working on the project? What did you learn about yourself? For example, did you employ a new creative skill, do you see yourself as more confident in the area than you did when the term started, did you become aware of assumptions you held, were you aware of any biases you held, what did you feel as a result of the project?
>
> What did you learn from this project? When did you learn those things? How will you use what you learned from this project in the future? How will this learning matter in terms of your career.

The data suggested that the service-learning projects were effective in facilitating team skills. Some responses were:

"From this project I have learned that if properly used, teamwork can get tasks accomplished a lot faster than individual work."

"I realize that other people have very excellent ideas (ideas that I couldn't have come up with on my own.)"

"I also realized I am one of those people who believes I could do it better myself and then discovers, no, I really couldn't. That was a pleasant surprise."

"I became a better team player though this project."

"I was also unaware of how little group work I did in my past classes."

"From this project I learned that time management and good communication are very important."

"I discovered from this project that groups that get along with each other and learn to trust each other do the best. Groups that function as one and help others complete tasks are the ones that, in our case, will receive the better grade, and in the real world, complete the task more efficiently and timely, with less stress."

"I learned how to balance and organize not only my time, but that of the team."

"Communication is a big issue. It is imperative that the group communicates effectively and frequently to ensure that everyone is on the right track. …As for future projects I will ensure that there is a clear and concise method for which we communicate…."

"This experience will help me in the future because I can set deadlines for intermediate steps early enough to account for the delays that occur."

Another interesting area was the gain in personal skills. Many students responded that their confidence increased through the project, which is consistent with the literature [5]. The following responses were typical:

"My reactions to this project are definitely positive and I really didn't think that they would be. I normally get very nervous presenting in front of people, but it was actually a lot of fun working with my group and I felt confident in their information, as well as my own, and I think that really contributed to me feeling comfortable enough to present without being overwhelmingly nervous."

"I felt that through doing this project, I've gained confidence in talking to a different type of audience than my peers and classmates."

Students also indicated that they gained content knowledge as they worked on the STEM education projects.

"I learned mostly about the Apollo missions and the tests they performed which I found very interesting actually."

"I learned a lot about the physical history of rockets and not just the history of rockets during my time period. I learned about the ancient rockets as I was doing research and then learned more about the "modern" rocket…."

"By doing this presentation I learned about gamble thrust. I didn't know how it worked before."

"I learned the basics of a plane and the four basic forces of flight."

The close-ended quantitative instrument was designed as an assessment measure to look at learning across sections. The open-ended qualitative method provided the degree of freedom for students to express their enthusiasm. Students articulated specific aspects of the learning they acquired through the service-learning project in terms of team skills and personal skills. Their comments also indicated substantive gains in content, with a stronger grasp of the STEM subject matters that they worked on.

Discussion

This study made visible that for a speech course where group projects are involved, not only do the students made significant gains in communication skills, they also made significant gains in their perceived ability to function in multi-disciplinary teams using a lens of ABET 3(d) and 3(g) criteria.

We did not find statistically significant difference between the students in sections with and without service-learning using this 5-factor omnibus test. The results yielded higher raw scores for the service-learning group, especially on the Team Skills factor. If we were to study only the Team Skills factor, we may find significant difference between the two pedagogies. Another point that deserves mention is that the service-learning project was the first major

assignment of the course, whereas the team projects came at the end of the term in the non-service-learning sections. In a previous term, the service-learning project took place at the end of the course and we noted more pronounced gains. The team factor appears to be sensitive enough to detect differences in our kind of setting. We plan to further develop the team skills assessment method which might be valuable in future service-learning research.

Recommendations

We embarked upon this research to better understand how and to what extent pedagogy relates to student learning, and then to use the findings of this research to inform practice. The quantitative and qualitative data in this study offered some insights into the learning that took place.. Chickering and Gamson's [27] outlined seven principles of effective teaching practices in undergraduate education:

1. encouraging contact between students and faculty,
2. developing reciprocity and cooperation among students,
3. encouraging active learning,
4. giving prompt feedback,
5. emphasizing time on task,
6. communicating high expectations, and
7. respecting diverse talents and ways of learning.

Service-learning offers a structure designed for putting these principles into practice. Students interacted with faculty before, during, and after the service-learning experience. Students worked in teams to develop and deliver their presentations. The project involved active learning with students engaged in researching, writing, working as a team, developing and delivering presentations. Students rehearsed their presentations a week in advance and received immediate feedback, which they incorporated in their presentations to the families. When they presented in the family science programs, they also received immediate feedback. This time the feedback came from the audience in the forms of nonverbal communication and questions. At the conclusion of the program, participants were asked to respond to questions the university students had written, which was another form of feedback focused on content. Time on task was facilitated by developing timelines for the projects. Exemplars of presentations by teams from other classes were shown to the students. They knew that the community partner and their instructor had high expectations for them. Team members were encouraged to identify each other's strengths and to build on them. Additionally students took various learning styles into account when developing their presentations. These practices help build a rich and satisfying learning environment, and service-learning addresses each to different degrees.

Changes can and will be made based on results and on feedback from the students. For example, feedback indicated that students can benefit from more explicit instructions for time on task. Rehearsals and the feedback generated from those presentations will be continued because students expressed appreciation of that feedback in preparing for the target audience.

Reflections in this discussion section are generated by one faculty member. We plan to look at the items on which the greatest amount of change was demonstrated for each faculty

member, and then follow up with instructors to learn and share how they address those elements in their courses.

There are limitations that warrant mention. Many aspects of communication could be assessed. This paper only addresses oral communication competencies, personal skills, and team skills. The survey mentioned in the present paper reflects gains from the students' perspective. Student perceptions are important. Assessment of progress involves collecting and discussing information from multiple perspectives, rather than just one point of view [28]. Those perspectives can include faculty, peers, community partners, audience members, and other stakeholders. The method presented here involves outcome measures for one course. Additional measures of these skills and knowledge items should take place at later points in time for a deeper understanding of what students know and can do with their knowledge over time and in different contexts.

This assessment explored students' perceptions of their knowledge and skills on selected discipline-defined expectations for people completing one college course in speech. What we gleaned relative to student learning was what we expected to see in the broad sense from the survey results. The qualitative data supplied information that complemented the quantitative findings. The results provided insights into student learning that informed the faculty and will hopefully lead to improved student learning.

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Appendix A: Survey Instrument Used in Pre-test and Post-test

Class_____ Name_____ Major_____ Date _____ Please place an X in the column to the right describing your abilities in each area.	I rate my abilities in this area as:				
Content	**Poor**	**Below Ave.**	**Ave.**	**Above Ave.**	**Exc.**
Identify a subject that is relevant to your role as a speaker, your knowledge, concerns, and interests.					
Adapt and narrow topic to the context in terms of audience and setting.					
Locate, evaluate, and use information resources.					
Based on your research, select appropriate support materials based on the topic, audience, setting, and purpose.					
Cite sources appropriately.					
Select language appropriate to the topic, audience, purpose, context, and speaker.					
Choose words to clearly express ideas, to create and maintain interest, and to enhance your credibility.					
Select words that avoid sexism, racism, and other forms of prejudice.					
Communicate ethically.					
Use creativity in writing the speech.					
Identify and create visuals and other presentation aids that support the purpose of the speech.					
Organization	**Poor**	**Below Ave.**	**Ave.**	**Above Ave.**	**Exc.**
Organize ideas and contents in patterns that are appropriate to the topic, audience, context, and purpose.					
Adapt speech to audience.					
Write and deliver an effective introduction.					
Write clear and distinct main points.					
Summarize the central message in an effective manner.					
Write effective transitions to establish connections.					
Write and deliver an effective conclusion.					
Delivery	**Poor**	**Below Ave.**	**Ave.**	**Above Ave.**	**Exc.**
Demonstrate nonverbal behavior (including emphasis, gestures, posture) that supports the verbal message.					
Use vocal variety to heighten and maintain interest.					
Articulate clearly.					
Maintain eye contact with audience during at least 90% of your speech.					
Speak confidently.					
Speak dynamically.					
Use creativity in the delivery of the speech.					

Team Skills	Poor	Below Ave.	Ave.	Above Ave.	Exc.
Appreciate diverse perspectives of team members.					
Recognize that individual differences can improve the team's outcome.					
Demonstrate professional behavior in team meetings.					
Set and manage realistic agendas.					
Adapt behavior to the task being done.					
Motivate others to participate and work effectively as a team.					
Manage time and resources effectively in accomplishing the team task.					
Communicate team activities (e.g. sharing meeting times and places, sharing contact information, sharing files) with the team effectively.					
Complete tasks assigned in the team in a timely fashion.					
Identify important issues or problems in a team.					
Speak up and share your ideas in a team.					
Identify and manage misunderstandings.					
Manage and resolve team conflicts effectively.					
Negotiate with team members effectively.					
Build consensus in a team.					
Incorporate comments from critiques into the final presentation.					
Demonstrate appropriate interpersonal skills for various contexts.					

Personal Skills	Poor	Below Ave	Ave.	Above Ave	Exc.
Respect others.					
Be responsible.					
Be intellectually curious.					
Be a self starter.					
Strive for excellence.					
Demonstrate positive attitude consistently.					
When speaking or listening, demonstrate awareness that each person has a unique perspective.					
Demonstrate awareness that each person's knowledge, experience, and emotions affect listening.					
Recognize main ideas delivered in a presentation.					
Recall basic ideas from listening to presentations.					
Listen to comprehend.					
Accept criticism in a professional manner.					
Always be on time.					
Communicate if you cannot meet an obligation.					
Demonstrate empathy.					