Implementing Service-Learning in the Pharmacy Curriculum

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The purpose of this paper is to describe the structure, content and requirements of the service-learning component of first professional year pharmacy students. In addition, the paper also provides excerpts from student reaction logs describing their experiences. To fulfill the service-learning requirement, students must meet the following criteria: (i) serve a minimum of 18 hours within a single service organization; (ii) be directly involved with the agency's clientele; and (iii) complete specific tasks that address concrete human needs. To document their activities, students must obtain a written agreement from the agency supervisor, who also documents time spent in the agency. To ensure a successful experience, students are required to submit written goals and objectives prior to starting their experience. At mid-semester, students are required to submit a reaction log that reflects upon their experiences. At the end of the semester, students submit a paper detailing their experiences and their perceptions of service to the community. Students served in a variety of settings and agencies including: elementary schools, nursing homes, AIDS hospices, Habitat for Humanity, cancer centers, Alzheimer's groups, homeless, mentally ill, and shelters. The reaction logs and the written papers reflected that the experience was enlightening and educational. Service-learning is a way to a mutually-fulfilling reciprocal arrangement where students and community members can each be learners and teachers, servers and served. Implementing this type of experiential education may help to introduce the concepts of caring and social support into the curriculum.

INTRODUCTION

In a 1997 AACP Position Paper(1), Service-Learning (S-L) was described as another type of experiential education that could help introduce and enforce the concept of caring and social support into the curriculum. The report also stated that S-L could provide an opportunity to introduce interdisciplinary or interprofessional teams into the curriculum. Several pharmacy schools/colleges have either incorporated or are working towards incorporating S-L into their curricula(2-15) either as an elective component or as a required course. S-L projects in pharmacy schools/colleges focused primarily on health education and promotion. Some of the intended outcomes of these projects were to help students improve their communication skills and to help them gain a better understanding of community issues and needs. The purpose of this paper is to provide a description of how The University of Texas College of Pharmacy (UT-COP) has incorporated S-L into the curriculum as a required component.

Definition/History of Service-Learning

As a type of experiential education, the term Service-Learning equally emphasizes Service (community action) and Learning (additional knowledge gained) with the two components being equally balanced and integrated. The hyphen between the two terms signifies the role of reflection to integrate both service and learning(16). S-L differs from volunteerism where the primary goal of the community action is serving and the primary beneficiary is the recipient of the service. The reciprocal relationship of S-L is one that benefits both the servers and the served(17).

The theoretical roots of S-L stem back to the 1930s with John Dewey(18), who believed that learning occurs through a cycle of action and reflection. Since this time, S-L programs have

been proliferating in variety of educational settings spanning from middle schools to higher education(19). Recently, other health professions have embraced the S-L concept by developing S-L programs and incorporating them into the curriculum(20-24).

S-L programs in pharmacy schools/colleges vary in their design and content. Several programs(3,5,7,10-15) have incorporated S-L throughout the curriculum ranging from companionship and community service experiences for first year pharmacy students to more health care and health promotion services for advanced students. One school(4) has developed an interdisciplinary team of pharmacy, nursing, medical, dental, and physician assistant students. This interdisciplinary team worked together to develop health education and promotional programs for social services agencies. The S-L programs described above were offered as elective courses or were part of a voluntary pilot project.

DESCRIPTION OF THE PROGRAM

Service-Learning was started in the fall of 1996 at the University of Texas, College of Pharmacy. Since the start of the program, two revisions have been made. The required number of S-L hours was reduced from 24 to 18 hours and the criteria for choosing a S-L experience was revised to ensure that students had contact with people being served by the agency.

Currently, students are required to complete a S-L experience. During their first professional year of pharmacy school, students are enrolled in a two-semester course entitled, "Introduction to Pharmacy." As a part of this course, students are required to complete a Shadowing experience during one semester and a S-L experience during the alternate semester. The following will focus on the structure of the S-L experience.

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To fulfill their S-L requirement, students are required to complete a minimum of 18 hours of continuous service within a single service organization over a period of 12 weeks during the semester. Students must select a service organization that is primarily focused on serving the community. Working with community service organizations provides students with an opportunity to learn more about the people that they may later serve in their pharmacies.

This program differs from other pharmacy programs in that some of the programs are targeted toward a specific agency or group of people. The primary goal in the students' selection of an agency was that the experience must be a mutually-fulfilling reciprocal arrangement where students and community members can each be learners and teachers, servers and served. Because the S-L experience occurs during the first professional year of pharmacy school, students' knowledge of drugs and disease states are minimal. Thus, a more general approach was taken by encouraging students to select an agency based on an area of interest in which they felt the need to explore through experiential learning.

To ensure that students understand the needs and issues of their chosen population, they are required to have direct personal contact with the clientele that the agency serves. The direct personal contact is facilitated by involving the students in tasks that address the specific needs of the agency's clientele. Students are instructed to avoid activities (*e.g.*, filing papers, answering the telephone) that do not involve interacting directly with the clientele.

Service Agency Resources

The University of Texas (UT) provides students with several resources to aid in selecting an agency. The UT Volunteer Center is a campus-based clearinghouse and action center for UT students, faculty, and staff. It houses a computer database with over 900 projects for more than 200 agencies in Austin. Students can make an appointment for a one-on-one interview with the Center's representatives or they can query more than 30 different information sheets on "areas of interest." Examples of these "areas of interest" include the following: children and youth, senior citizens, mental health, healthcare, domestic violence, HIV/AIDS, disabilities, hunger and homelessness, substance abuse, women's issues, and diversity. Both of these search avenues provide the student with project descriptions, contact persons, as well as shuttle bus routes to the locations.

The UT Volunteer Center also sponsors a Volunteer Fair at the beginning of the fall and spring semesters. Many students take advantage of the Volunteer Fair where they can meet faceto-face with over 100 agency representatives and discuss with them how their personal interests and course requirements can help meet the needs of the agencies. In addition to the above, students are also allowed to seek out agencies on their own. Once a student identifies an agency, the supervisor must agree to the terms of the course and sign the written supervisor agreement form (Appendix A). Students must also submit this form to the course coordinator for approval.

Documentation of the Service-Learning Experience

Through the course of the semester, students are asked to submit three written assignments: goals and objectives, a reaction log, and a paper detailing their service-learning experience. Students must develop at least two individual goals and related objectives to help guide their experiential learning experience. These goals and objectives are due during week 4 of the semester and both the agency supervisor and the course coordinator must approve them. All students were provided feedback on their goals and objectives. Those students who did not receive initial approval by the course coordinator or agency supervisor were required to revise and resubmit their goals and objectives.

The next written assignment is a reaction log (minimum one page), which is due midsemester (during week 7). The reaction log is one of the most important assignments of the semester because this is where the students "connect" their service to learning. At the beginning of the semester, students are instructed to write about each of their agency visits and reflect upon the events. For the reaction log assignment, students are required to choose one or two events, describe what happened, and reflect upon them. This process requires the students to internalize the event(s), analyze the situation(s) and reflect upon how the event(s) could help them understand something about themselves or the group of people they serve. In addition, students must describe how the event(s) could affect their present and future patient interactions. The reaction logs were evaluated based on a satisfactory/unsatisfactory basis. Unsatisfactory reaction logs could be revised and resubmitted. See Appendix B for excerpts from student reaction logs.

The last writing assignment is the completion of a 1300-1700 word paper detailing their S-L experiences (due during week 12). This paper also serves as a substantial writing component in which students are graded for both grammar and content. The paper must include: a definition and description of the principle of service and its importance: a description of the role of volunteers in the agency and the advantages and disadvantages of pharmacist participation; a description of their goals and objectives and how they were met through their experience; a reflection of their experiences and what they learned; and a description of their future role in community service. In addition to written references, students must also conduct at least three personal interviews with other volunteers in the agency, as well as agency staff. The primary purpose of the personal interviews is to obtain additional information on the role of volunteers in the agency (See Appendix C for the grading criteria). At the end of the semester, students must also submit a signed time sheet that documents the hours completed. The agency supervisor is also required to submit an evaluation of the student (Appendix D).

Personnel Resources

A recent study(25) cited time as the primary barrier to implementing S-L programs in pharmacy schools/colleges. Specific "time" barriers included were student time, curriculum time (space), and coordination time. Regarding the student time, the College has found that 18-hours/semester is optimal for the students. Previous semesters required a 24-hour/semester time commitment, but the hours were decreased to 18 based upon student surveys and input. Surveys over the past two semesters have shown that the 18-hour commitment is feasible for the students.

Faculty supported the inclusion of S-L in the curriculum as a required component, but like most schools, the College struggles to balance the pressures of an ever-expanding curriculum. To balance these pressures, S-L is not offered as a separate course, but as a component of a larger course. Satisfactory completion of the S-L component contributes 35 percent to the total course grade. Regarding the time required for coordinating the course, the S-L component utilizes one faculty member and one teaching assistant. The faculty member is responsible for assuring that all assignments are turned in on time, and for approving the students' agency selection and individual goals and objectives for the experience. The faculty member also reviews

	Agency clientele	Community service agencies	Pharmacy students
Service	 Shared personal information about their lives and situations Provided pharmacy students with unique insights on various issues 	 Provided pharmacy students with opportunities to learn about diverse populations Oriented students to community service Supervised and evaluated their experiential learning 	 Provided: Companionship Family Relief Mentoring Tutoring Recreation Transportation Physical Therapy
Learning	 Cognitive skills Leadership skills Communication skills Conflict management Exercise techniques Relaxation techniques 	• How pharmacy students can be beneficial in providing services to diverse populations	 Disabilities/diseases Diversity Communication skills Leadership skills Caring/Empathy Importance of community service and social support

Table I. Balanced and reciprocal relationships of service-learning

and provides constructive grammatical and composition comments on the students' reaction logs. Although the faculty member reviews the final S-L paper, a teaching assistant is responsible for grading the assignments. The UT Volunteer Center is a valuable resource in that the connections between community agencies and students have already been established. Thus, faculty time is not spent administering programs at various sites or developing student activities.

Although pharmacy schools/colleges have incorporated S-L in a variety of formats, most(4,6,10-13,15) have selected environments that focused on second to fourth year pharmacy students performing specific pharmacy related activities. Offering a "general" community S-L experience can be beneficial to first-year pharmacy students, as well as faculty. Because first-year pharmacy students have limited drug and disease state knowledge, a general community service approach can provide increased exposure to social services and their role in supporting society. In addition, because most agencies have "standard" volunteer activities, the "general" approach may reduce faculty time and effort spent on organizing activities for the students.

REFLECTIONS ON THE S-L EXPERIENCE

Reciprocal Relationships

As stated in the introduction, the reciprocal relationship of S-L is one that benefits both the servers and the served. Table I shows how the two components of service and learning were beneficial to all parties involved. Although they were not surveyed directly, information from students' assignments was used to assess both the service and learning of the agency clientele. The agency clientele were the means by which students learned. The clients' willingness to share experiences and insights provided the students with unique learning opportunities that cannot be captured in a textbook or classroom.

Community service agencies were extremely willing to partner with pharmacy students. Survey evaluations (Table II) showed that students performed very well, overall, by exhibiting high levels of communication and quality assertiveness skills. The evaluations also showed that pharmacy students worked well with the clients, other volunteers as well as agency staff. Additional written comments and personal communications with the agencies supported the value that pharmacy students provided to the agencies. The course coordinator received many phone calls requesting that pharmacy students continue to be involved with the agency.

Because the agency and population selection was determined by the students, there was wide range of experiences. Over one-half of the students served the youth as mentors and tutors. Approximately one-third of the students provided companionship services to the elderly. Some students served mentally ill patients, as well as terminally ill patients. Other students worked with the homeless to help them find employment, whereas others helped the homeless through the building of homes.

Caring and Social Support

The primary purpose of requiring S-L as part of the pharmacy curriculum was to introduce the concept of caring and social support. In William Zellmer's lecture entitled "Searching for the soul of pharmacy"(24), he quoted Thomas Moore's description of soul: "Soul is not a thing, but a quality or a dimension of experiencing life and ourselves. It has to do with depth, value, relatedness, heart, and personal substance." Although all of the aspects of "soul" are integral to providing pharmaceutical care, the concept of "relatedness" was prevalent in the students' S-L experiences.

One of the synonyms for "relatedness" is "connectedness." "Relatedness" promotes a "connection" between the student and the patient and it helps to facilitate trusting relationships. How do students "relate" or "connect" with their patients? S-L enabled the students to "relate" better with people by helping them to be more: understanding regarding personal challenges; empathetic towards their situations; and effective communicators. Students began to understand more about people who were in compromised situations. "Relatedness" promotes a "connection" between the student and the patient and it helps to dispel fears about others that may appear to be different on the surface. Many of the students entered their S-L assignment with apprehension and fear about a particular patient population (see Excerpts 2, 6, and 7 in Appendix B. They soon learned that whether the person were elderly, young, or stricken with an incurable disease, they were people who deserved respect and quality healthcare. By understanding patients' specific situations, students can learn how patient differences can impact their medication taking and other health behaviors, which is key in developing individual pharmaceutical care plans.

When students better understand patients' circumstances, they are better able to empathize with their situations. Being able to show empathy is an essential characteristic for pharma-

Table II. Community service agency supervisors' evaluations of pharmacy student performance

	Mean	SD	
Rating of student's overall performance as a worker within the agency ^a	4.6	0.6	
Quality of volunteer's communication skills ^a	4.6	0.6	
Quality of volunteer's assertiveness skills ^a	4.4	0.8	
Ability to work effectively with clients ^a	4.6	0.7	
Ability to work effectively with co-workers ^a	4.6	0.7	
Level of contribution to the agency made by the student ^b	4.6	0.7	
Would you work with this volunteer again? ^c	4.8	0.4	
Do you think the experience facilitated learning by the student? ^c	4.7	0.5	

N=112

^a1=poor, 2=average, 3=good, 4=very good, 5=excellent.

^b1=very little, 2=little, 3=moderate, 4=much, 5=very much.

°1=definitely no, 2=no, 3=maybe, 4=yes, 5=definitely yes.

cists in "relating" to their patients. This type of understanding and empathy leads to a more "caring" relationship between the patient and pharmacist. This caring and supportive relationship is also the beginning of building a trusting relationship. Understanding coupled with empathy can be a powerful avenue into helping the patient with their needs. Many students observed patients stricken with a disease or a disability (see Excerpt 1 in Appendix B). The personal patient contact and experiences were valuable windows into patients' eyes. Students may be able to draw on these experiences to help facilitate more caring relationship with their patients.

Effective communication with patients is paramount in helping them to optimally manage their disease states through drug therapy or lifestyle changes. Understanding and empathizing with patients can only enhance the level of communication. Becoming aware of barriers or challenges that patients face can influence drug therapy recommendations for a specific patient. Although pharmacists may be effectively communicating with the patient, the receptiveness of the information provided may be related to the type of relationship shared by the pharmacist and the patient. The more pharmacists understand and empathize with patients, the more patients may be willing to receive and utilize the information. The S-L experience was instrumental in helping the students modify their communication style to meet the needs of the agency's clientele. Students learned how aspects of education, culture, disabilities, and emotional status affected how they needed to communicate with their patients (see Excerpts 3,4,5,8 in Appendix B). The S-L experience helped students to embrace the concept of caring through aspects of "relatedness" (understanding, empathy, and communication).

CONCLUSIONS

S-L has been successfully implemented in the UT-COP curriculum as a required component for first-year pharmacy students. S-L provided mutually fulfilling reciprocal relationships between community service agencies, agency clientele, and pharmacy students. Through their interactions with agency clientele, pharmacy students started to learn some of the basic principles of pharmaceutical care which start with relating to the patient through empathy and understanding and being able to promote optimal outcomes through effective communication.

References

- The Commission to Implement Change in Pharmaceutical Education, "A Position Paper: Maintaining our commitment to change," AACP News Special Report, 1-8(1997).
- (2) Nickman, N.A., "Community service in Utah," Am. J. Hosp. Pharm., 50, 1578(1993).
- (3) "Service and learning-A syntergizing combination," Annual Report, Purdue University, School of Pharmacy and Pharmacal Sciences, West

Lafayette IN (1996) pp. 12-13.

- (4) Brandt, B., "Interprofessional health professions service learning at the University of Kentucky," Am. J. Pharm. Educ., 61, 85S(1997).
- (5) Gardner, S.F., Wolfe, J., Reinhardt, G., White, L., Fowlkes, K., et al., 'Hearts and hands: integrating service learning throughout the pharmacy curriculum," *ibid.*, **61**, 100S(1997).
- (6) Pitterle, M.E., Duerst, B., Chewning, B. and Brown, M.C., "Developing an Academic/Community Partnership to Provide Service Learning," *ibid.*, **61**, 90S(1997).
- (7) Lamsam, G.D., "Development of a service-learning program," *ibid.*, **63**, 41-45(1999).
- (8) Rea, J., Hammerich, S.K. and Vance, MA., "Butler University collaborative service learning project with the Indianapolis Parks and Recreation Department (IPR)," *ibid.*, **61**, 100S(1997).
- (9) "New clerkship enables pharmacy students to study patients over time," *Pharm. Record*, University of Minnesota, Minneapolis MN (1998) pp. 10-11.
- (10) DeWitt, B. and Piascik, P., "Experiential learning through community service," *Am. J. Pharm. Educ.*, **62**, 102S(1997).
- Duerst, B. and Pitterle ME., "Implementing a service learning experience for entry-level PharmD students," *ibid.*, 62, 96S(1997).
- (12) Rodriguez De Bittner, M. and Fedder, D.O., "Introducing service-learning into a pharmacy school curriculum: Experience with an elective course," *ibid.*, **62**, 107S(1997).
- (13) Franson, K.L. and Shimomura S.K., "Instituting service learning early in the curriculum," *ibid.*, **62**, 117S(1997).
- (14) Nickman, N.A., "(Re-) learning to care: Use of service-learning as an early professinalization experience," *ibid.*, 62, 380-387(1998).
 (15) Scott, C.S. and Deloatch, K.H., "Advanced pediatric pharmacotherapy:
- (15) Scott, C.S. and Deloatch, K.H., "Advanced pediatric pharmacotherapy: An elective course with service-learning," *ibid.*, 62, 420-426(1998).
- (16) Eyler, J. and Giles, D.E., "Identifying the Learning Outcomes of Service," in *Where's the Learning in Service-Learning?*, Jossey-Bass Publishers, San Francisco CA (1999) pp. 1-22.
- (17) Stanton, T.K., Giles, D.E. and Cruz, N.I., "Helping a 'New' Field Discover its History," in *Service-Learning: A Movement's Pioneers Reflect on Its Origins, Practice, and Future*, Jossey-Bass Publishers, San Francisco CA (1999) pp. 1-11.
- (18) Dewey, J., *Experience & Education*, Collier Books, New York NY (1938) pp. 27-28.
- (19) Shumer, R. and Belbas, B., "What We Know about Service Learning," *Educ. Urban Society*, 28, 208-23(1996).
- (20) Eckenfels, E.J., "Contemporary medical students' quest for self-fulfillment through community service," *Acad. Med.*, 72, 1043-1050(1997).
- (21) Corners, K., Seifer, S., Sebastian, J., Cora-Bramble, D. and Hart, R., "Interdisciplinary collaboration in service-learning: Lessons from the health professions," *Mich. J. Comm. Service-Learning*, 113-127(1996).
- (22) Seifer, S., "Service-Learning: Community-Campus Partnerships for Health Professions Education," Acad. Med., 73, 273-77(1998).
- (23) Simoni, P. and McKinney, J., "Evaluation of Service Learning in a School of nursing: Primary Care in a Community Setting," J. Nurs. Educ., 37, 122-128(1998).
- (24) Greenberg, J., "Service-Learning in Health Education," J. Health. Educ., 28, 345-349(1997).
- (25) Murawski, M., Murawski, D. and Wilson, M., "Service-learning and pharmaceutical education: An exploratory survey," *Am. J. Pharm. Educ.*, 63, 160-164(1999).
- (26) Zellmer, W., "Harvey A. K. Whitney Lecture. Searching for the soul of pharmacy," Am. J. Health-System Pharm.,53, 1911-6(1996).

APPENDIX A. EXAMPLE OF SUPERVISOR'S AGREEMENT FORM

To:	Supervisor, Volunteer Agency
From:	Course Instructors
	PHR 249A/B: Introduction to Pharmacy
Re:	Agreement to Supervise Student in Service-Learning
	Experience
Thank y	you for agreeing to supervise a pharmacy student enrolled in

Initial you for agreeing to supervise a pharmacy student enrolled in our "Introduction to Pharmacy" course. This component of this required course is designed to provide an opportunity for students to engage in a community service-learning experience in the Austin community or UT campus. This experience should benefit the agency and community, while the agency and community will contribute to and enhance the learning of the student regarding the social context of the people of the community for whom eventually our students will be providing pharmaceutical care. The students are required to analyze their experience in light of their career and personal objectives, the objectives of the agency in which they volunteer, and the student's future role in service to the community.

In order to ensure that your supervising role is clear, we ask you to read and sign the following agreement. You may wish to make a copy for your own files.

____ I am willing to serve as the supervisor for Mr./Ms.____

I understand that the pharmacy student will agree to volunteer for a minimum of 18 hours over a period of either August 31 through November 13,1998 (if fall semester) or January 21 through April 9, 1999 (if spring semester). The schedule will be developed by mutual consent of the student and supervisor, so as not to conflict with other scheduled academic courses.

I agree to:

- orient the student to the agency and meet with the student on a regular basis.
- review and comment on the student's written personal goals and objectives as they relate to agency objectives.
- verify and sign the student's time sheet documenting the hours worked.
- consult with the course instructors if needed.
- complete an evaluation of the student volunteer's performance at the end of the semester.

Signed: _____ Date: _____

PLEASE PRINT:

Supervisor's Name
Agency Name
Agency Address Zip

Agency Telephone Number

APPENDIX B. EXCERPTS FROM STUDENT REACTION LOGS

Excerpt 1

"I am also learning other lessons about patients' needs. I can see that the patients understand how illness and age is affecting them and how they are concerned and uneasy with the developments. One gentleman, [Patient A], had suffered a stroke a few months before his knee surgery and was having trouble understanding and carrying out our directions for the exercises. Each time I corrected his form or demonstrated an exercise, he would humbly excuse himself for not understanding; explaining that 'that stroke' had 'messed up his mind'. I had no idea

what to say in response, but I began to understand how to empathize."

Excerpt 2

"Nervous and a little apprehensive are the best ways to explain my feelings as I met [Patient B], a blind and elderly woman at [Agency A]. I couldn't imagine growing up blind, but to be elderly and blind is another milestone in life. When I first met her she took my hand, introduced herself, and directed me to a blue chair that I sat in during our conversation. I began wondering how she knew the chair was blue. By just talking with her for a few hours, I realized that blindness is not always a disability. Here was a woman who made it through life without any sight. I felt extremely satisfied as I left [Agency A] that day. It was the kind of feeling I really cannot explain. It was an internal feeling of good that no one else could have given me. It does not come from a compliment, but from a sense of self worth. I never realized that a few hours out of my week would bring someone so much happiness."

Excerpt 3

"Another instance that was less successful, but just as enlightening was trying to explain the upper body exercises to a blind, elderly patient. [Patient C] was perfectly willing to do as I told her, but my descriptions of biceps curls, triceps curls, shoulder presses and chest presses were obviously confusing! That experience made me realize that a description I present, although perfectly clear to me, might make no sense at all to a confused patient."

Excerpt 4

"This experience has meant a lot to me. It has shown me the importance of being an active listener, and a reliable dedicated volunteer. I realize that there are many homebound people who do not receive proper health care due to the lack of transportation. Volunteers make a big difference in the lives of the homebound by bridging the gap between them and the access to health care."

Excerpt 5

"[Patient D] taught me a valuable lesson in communication that morning. If I am to be a pharmacist, providing pharmaceutical care for others, I need to be sensitive to the feelings of every patient I serve. For some residents at the retirement center, issues of independence and productivity are dear to their hearts. Not all residents in assisted living facilities have lost all capability of caring for themselves. Sight, hearing, and health may decline with age, but dignity should increase. A pharmacist's duty is to care for the health of others, but just as importantly, we must safeguard and foster each patient's self-esteem."

Excerpt 6

"After this experience I realized that these children are not much different and need what we all need in life - a little attention. Also, this experience taught me how to behave and act around those children with special needs, and how I can make them feel comfortable around other people. Although I know that my couple of hours of playing with the children will not make all the problems disappear at home, but for however long it lasts, I know that I was able to make that child happy."

Excerpt 7

"From volunteering at [Agency B], I have learned that these young people accept others readily and actively look for role models. Young people of all ages need someone to look up to in their life, especially those who come from single parent families and disadvantaged economic and social circumstances. Being a positive role model for these young people meant a great deal to me, and I hope to do more in the future."

Excerpt 8

"[Patient E] is severely developmentally delayed, he is not potty trained, nor can he speak. I have learned a lot about communication from this four-year old child. Communication with [Patient E] means a lot more that just words. A touch, a smile, a hand gesture, anything to reinforce verbal communication is important. Approaching any situation with love and concern will almost always make the listener more receptive and accepting of your comments and ideas. Facial expressions and gestures will further let the listener know that you are interested in talking with them. This is not only true in the situation with [Patient E], but it also applies to life in general. Often times we don't take into consideration that what we are saying may not be understood by the listener. To help make ourselves more clearly understood, we need to consider to whom we are talking. Will they understand our words? Do we need to break it down to a simpler level, as is the case with [Patient E]? Should we speak louder or slower? Effective communication is important is every aspect of our lives, whether it be social or professional. This is why I believe that one of the most valuable lessons I have learned thus far through working with these children has been that words are not always the most effective form of communication."

APPENDIX C: GRADING CRITERIA FOR SUBSTANTIAL WRITING COMPONENT PAPERS

At the "Microlevel"

- 10% Spelling (sp) Proofread and spell-check. There is no excuse for misspelled words.
- 10% Word choice (wc) Common problems include: wordiness, improper use of a word, "common" words or trite expressions used repeatedly, slang or "spoken" language. Are your words exact? direct? appropriate? [Example: "That was really really neat" could instead be "I enjoyed the experience immensely."] Avoid using words such as really, actually, definitely, and basically.
- 10% Sentence Structure (ss) Essential to an effective paper is basic grammar, such as proper and consistent verb tense, punctuation, and use of pronouns. Common problem areas are sentence fragments, comma splicing, run-ons sentences, faulty agreement, awkwardness, and lack of clarity.

At the "Macrolevel"

- 15% Paragraph Organization (po) Follow basic paragraph construction rules, such as unification of the paragraph around a central idea or thought, cohesiveness (keeping to the subject), coherence within the paragraph, logical order of paragraphs, clear sentence relationships, a clear topic sentence, appropriate paragraph length, and effective transitions.
- 10% Writing Style (ws) Make sure your writing is not only "grammatically" correct, but also has effective writing style. This section relates to the "elegance" of writing style. Consider these points: Do ideas in a sentence related to one another? Is there variety in sentence structure, *i.e.*, short simple sentences vs. complex sentences? How well do you position important words to emphasis points? Do you write more in active (vs. passive) voice? Avoid directly addressing the reader (or others) as "you." [For example: "You learn a lot from shadowing" versus "The shadowing assignment allowed me to learn more about three unique and progressive settings which practice pharmacy practice."]
- 20% The Whole Composition (comp) The paper should have an effective introduction (including a thesis statement), body, and conclusion. Consider this rule: "Tell the reader what you are going to say, say it, and then tell the reader what you just said." Finally, review the assignment instructions to ensure that you have adequately addressed all assigned topics within the paper.

Other

10% *References (ref)* - You must have a minimum of four appropriate and current references for the Short Critical Report, and a minimum of six (three written and three personal interviews) appropriate and current references for each Long Writing Assignment. Dictionaries do not count, although you may use them if you wish. In addition, for the shadowing and service learning assignments, web sites also can be used but do NOT count toward the three written references. Your interviews must be current. References must be FULLY and appropriately cited in a bibliography (or reference page). Reference page should be on a separate page, and should be appropriately titled. Endnotes and footnotes are not adequate substitutes for a reference page.

- 10% Use of References (ur) Both interviews and written references must be appropriately used and effectively cited in the body of your paper. [Inappropriate use: "Mrs. Jones agreed completely," Appropriate use: "Mrs. Jones confirmed my belief that service learning is a wonderful opportunity to learn more about our patients through direct interaction." (Personal Interview, October 13, 1999)]]
- 5% *Appearance (ap)* Make a positive impression by remembering the basics: a cover page, page numbers, 12 point font (Times New Roman), 1-inch margins, stapled or bound pages, no "coffee rings," and no penciled-in corrections. You are turning in the final draft, not a rough draft.

APPENDIX D. EVALUATION FORM

Supervisor Evaluation Service-Learning Experience

Print clearly. Please add written comments on specific ratings at the bottom of this page.

Student's Name:		
Supervisor's Name:		
Agency:	Telephone Number:	

- How would you rate the student's overall performance as a worker within your agency?
 - ____ Excellent ____ Very good ____ Good ____ Average ____ Poor
- From what you have personally observed, how much of a contribution to the agency did the volunteer make?
 Very much Much Moderate Little Very Little
- 3. Please rate the quality of the volunteer's communication skills (giving and receiving feedback, written and oral communication, sensitivity to others, etc.)

___ Excellent ____ Very good ____ Good ____ Average ____ Poor

- Please rate the quality of the volunteer's assertiveness skills.
 Excellent ____ Very good ___ Good ___ Average ___ Poor
- 5. Please rate the volunteer's ability to work effectively with your clients.

___Excellent ____ Very good ___ Good ___ Average ___ Poor

6. Please rate the volunteer's ability to work effectively with coworkers.

___Excellent ____ Very good ___ Good ___ Average ___ Poor

7. If you had the opportunity to work with this volunteer again, would you?

____ Definitely Yes ___ Yes ___ Maybe __ No ___ Definitely No

 Do you think that this was an appropriate experience for this student volunteer which facilitated learning on his/her part? Please comment if not.

____ Definitely Yes ___ Yes ___ Maybe __ No ___ Definitely No

9. Would you make recommendations to the volunteer to increase his/her effectiveness?

OTHER COMMENTS OR SUGGESTIONS:

Date: Evaluator's Signature:

Please return this form to: Jamie Barrier, Ph.D., College of Pharmacy, University of Texas, Austin, TX 78712-1074