

Benefits of Service-Learning in Adult Aural Rehabilitation Course

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Abstract

Rationale

The purpose of this study was to determine whether students benefitted from a service-learning (SL) component incorporated into an aural rehabilitation course.

Methods

For three consecutive years, the students enrolled in the graduate-level Adult Aural Rehabilitation course at Purdue University spent the initial two-thirds of the course in the classroom and the final third at one of two assisted living facilities where they implemented course content while providing hearing screenings, aural rehabilitation sessions, and leading book discussions. Resident participants were asked to complete surveys to provide feedback to the students and students wrote daily reflections regarding their experiences.

Results

Specific themes emerged from the students' daily reflections, which included student awareness of building relationships, the opportunity to make a difference in the lives of others, and the educational advantages of hands-on learning. These qualitative data showed that the SL component added value to the students' education and learning in the course.

Introduction

Benefits of Service-Learning in Adult Aural Rehabilitation Course

Aural rehabilitation is defined as "intervention aimed at minimizing and alleviating the communication difficulties associated with hearing loss" (Tye-Murray, 2009, p. 671). The long-term goal of an aural rehabilitation course focused on elderly populations is to improve the lives of persons with hearing impairment and also benefit

student clinicians who are provided the chance to interact with older adults (Lesner, 1992). This interaction affords students the opportunity to personally discover the challenges and rewards of working with older adults who have hearing loss. One way to provide this experience to students, while also meeting a community need for aural rehabilitation services, is through service-learning (SL). The overall goal of this study was to add a SL component to the graduate-level Adult Aural Rehabilitation course at Purdue University to determine whether and how it enhanced student learning.

Service-Learning

Grounded in Dewey's (1938) theory of experiential learning, SL has been defined as a "form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development" (Jacoby, 1996, p. 5). Service learning implies that there is benefit to both the individuals providing the service as well as the recipients of the service (Sigmon, 1997). Courses that include SL blend service activities and academic course material to address real community needs, and the result is often a rich learning environment that also instills civic responsibility (Bingle & Hatcher, 1996). Service learning sets itself apart from volunteering, where the focus is on the service; and internships, where the primary emphasis is on student learning. Rather, SL is a blend of student learning and recipient benefit, such that all parties have needs met (Furco, 1996). It has been shown that reflecting on

their experiences can help students deconstruct preconceived notions relative to the group being served (Baldwin, Buchanan, & Rudisill, 2007).

Experiential learning theory provides additional support for the benefits of learning through peer and social interaction, rather than confining education to the classroom (Kolb, 1984). As shown in Figure 1, Kolb's experiential learning theory stated that "learning is the process whereby knowledge is created through the transformation of experience" (p. 38). He described a four-stage learning cycle that includes concrete experiences, reflective observation, abstract conceptualization, and active experimentation (McLeod, 2010). In order to enhance learning, activities should address each stage of the learning cycle and require students to go through the entire process. Additionally, having a direct experience, reflecting upon it, and making

changes based upon these reflections rather than simply studying the material will enhance learning (Smith 2001, 2010).

For example, in learning to lead an adult aural rehabilitation seminar, the following might take place: (1) Concrete experience - Instructor guides students in how to provide a presentation and answer questions, (2) Active experimentation - Students use what they have learned via coursework and incorporate their interpersonal skills to deliver a presentation with their own style, which occurs in the assisted living environment in a community setting within this particular class, (3) Reflective observation - Students observe peers delivering presentations and answering questions (again in the assisted living environment), and (4) Abstract conceptualization - Students participate in classroom activities that include reading research that identifies various methods of aural rehabilitation.



Figure 1. Overview of the experiential learning cycle (Adapted from Kolb, 1984).

The literature on the use of SL models in audiology courses is very limited. Cokely and Thibodeau (2011) compared student outcomes from their auditory rehabilitation course before and after the implementation of a SL component. Although their data showed that the majority of student outcomes did not change with the addition of a SL component, they did report that written comments from students indicated that the majority of students believed the projects strengthened the learning of core concepts, and more than 50% of the students indicated that the SL project was their favorite component of the course. Additionally, several students in the course reported that they gained professional confidence, real-world problem-solving skills, and increased self-awareness.

Kaf, Barboa, Fisher and Snavelly (2011) describe a SL experience that involved audiology and speech-language pathology students working in a nursing home with adults with dementia. They indicated that the experience resulted in students having more positive attitudes towards older adults in residential facilities. Including SL in a course on pediatric audiology also has been shown to result in increased interest in a career in pediatric audiology, and improved readiness to participate in pediatric hearing evaluations (Kaf & Strong, 2011). Finally, audiologists who provide aural rehabilitation services in assisted care living facilities have noted the benefit that this community service provided the older patient and that working in this setting required more than simply understanding hearing loss (Nemes, 2010).

In an effort to better understand the benefits of SL in aural rehabilitation instruction, the following study was conducted. The purpose of the study was to examine graduate students' experiences in and perspectives on the SL component of an adult aural rehabilitation course for use in consideration of future inclusion of SL in this course. Specifically, the following research questions guided this inquiry:

1. How do students describe their experiences working with older adults in a community-based aural rehabilitation setting?
2. What outcomes do students perceive from the SL experience?
3. How do the students' describe the connection between the SL experiences and the aural rehabilitation course?

Methods

Course Description

The Adult Aural Rehabilitation course at Purdue University is a graduate-level, 2 credit course taught over the summer session. For 3 consecutive years (2011 – 2013), the course included a SL component. The lecture portion of the course comprised the initial two-thirds of the class (approximately 23 hours of instruction) and the latter third of the class (approximately 13 hours) included SL to encourage students to apply what they had learned in class to staff and elderly persons in an assisted living facility. Course content included information related to hearing, hearing loss, amplification and assistive technology devices, auditory training, informational and emotional counseling, communication strategies, cerumen management, and presentation preparation. Additionally, classroom lecture time included discussions in which students were encouraged to practice answering common questions that arose from patients and caregivers. The instructor and peers provided feedback so that the respondent could reflect on the feedback and make modifications, if needed, prior to beginning the SL component.

Community Partners

Creating a SL educational experience required a community partner in need of service. Assisted living facilities were contacted 6 months prior to the start of each class. The needs of the facility and whether there was a need for aural rehabilitation services were discussed with the sites, as well as the time frame required to meet these needs. Over the 3 years, two different assisted living facilities in the Lafayette and West Lafayette, Indiana area partnered with Purdue University for this course. One facility, which will be referred to as "Serenity Retreat", was chosen for the first and third years, and the second facility, referred to as "Dublin Hills", was the community partner for the second year. In both assisted living facilities, residents lived in their own apartment-style living space but dined together in a dining hall. The ages of the residents ranged from 69-90 years and all were ambulatory.

Students

A total of 17 students participated in this course over the 3 year period (2011-2013). The course was for Clinical Doctor of Audiology (Au.D.) students beginning the third year of their 4-year training program. The group consisted of 17 females and who ranged in age from 22-26 years. All but one student were Caucasian. Approval was gained from the

appropriate institutional review board prior to implementing the study.

Planning and Development of Program Activities

The students had an opportunity to tour their assigned facility and meet with the staff 1 month prior to beginning the program in order to further define the goals of the SL project. Once an achievable short-term goal was defined, students reviewed relevant literature to determine best evidence-based practices for group aural rehabilitation, and made preparations to conduct the service program (compiling screening materials, presentation materials, etc.).

Two to 3 weeks prior to the start of the program sessions, a letter was distributed to residents detailing the mission of the program and the schedule of activities. This letter was posted on the activities board at the facility, placed in resident mailboxes, and included in the community newsletter. Pre-registration (signing-up) was encouraged so the students could better organize and plan for hearing screenings and have adequate handouts for presentations; however, pre-registration was not required for any activities and participation was optional.

The service program was free of charge to the residents and staff members, and program variations existed based on the needs of the individual facility, but ultimately the programs included hearing screenings, a series of group aural rehabilitation sessions, book club discussions, presentations to staff (first and third years), and a presentation to frequent communication partners (first year only). The hearing screenings were open to all residents and staff, and were supervised by the course instructor. Three aural rehabilitation sessions were offered, with each covering a different topic. The students worked in pairs to present the material in the these sessions. In addition to the presentations, the students answered questions and were given the chance before and after the presentations to interact with the participants.

Recent books selected for the book club included *A Quiet World* by David Myers (2000) and *Shouting Won't Help – Why I and 50 Million Other Americans Can't Hear You* by Katherine Bouton (2013). The books were provided for the residents interested in participating in the book club 2 weeks in advance of the sessions. The students prepared conversation starters and questions designed to elicit conversation, but were encouraged to allow residents to take the lead in asking questions and sharing thoughts regarding the readings. Students were assigned times when they would be the leader of these discussions. An example of a daily session follows:

- Set-up/Prep 8:30-9:00 A.M.
- Hearing Screenings 9:00-10:00 A.M.
- Book Discussion 10:00-11:00 A.M.
- Aural Rehabilitation Session 11:00-12:00 P.M.
- Wrap-Up/Discussion/Reflection 12:00-12:30 P.M.

Student Reflective Journals

To evaluate the impact of the SL experience, each student was required to keep a daily journal of their experiences and reflections. The students were free to write what they believed and perceived, but were encouraged to reflect on the following questions in order to assist in the reflective portion of this learning activity:

- What experience today was unique? Why? How did it impact you?
- Describe how you felt about your interactions with participants today.
- Discuss something you learned that will impact your future decision-making, counseling, and/or relationships with patients in the future.
- Was there anything you would like to keep, adjust, or change for future presentations based on your experiences today? Describe your experience and rationale.

The student journals were collected at the end of each semester and transcribed for analysis. As part of the transcription process, identifying information was removed to protect the identities of the students.

Resident Evaluations

The residents who attended sessions were asked to complete brief, one-page evaluation forms to provide feedback to the students. As shown in Appendix A, these evaluations included Likert-scale responses and open-ended questions. Completion of the surveys was optional and anonymous. The forms that were completed were transcribed to compare to the students' perceptions.

Data Analysis

Data gathered from the student reflections and resident/staff evaluations were analyzed by a trained qualitative researcher (second author) with the assistance of NVivo 9 data analysis software package (QSR International, 2010).

The qualitative researcher was not involved in the acquisition of primary data, allowing for independence in his analysis. The NVivo 9 software provided structure for the themes and allowed analysis file sharing. The analytic framework consisted of a combination of analytic induction and the constant comparative method (Lincoln & Guba, 1985). In contrast to deductive analysis in which the researcher codes data into a priori themes, analytic induction involves a process through which the themes emerge from the data analysis process (Strauss & Corbin, 1998). In this way, a framework is developed for communicating the essence of the data through the analysis process itself.

The constant comparative method focuses on reducing data, identifying emerging themes, and extracting the essence of what is being communicated through the data (Patton, 2002). Themes are categories of data that have been grouped together because they are communicating a similar message and reflect a pattern in the data. Themes are identified by “bringing together components or fragments of ideas or experiences, which often are meaningless when viewed alone” (Leininger, 1985, p. 60). Through constant comparison, themes are created, recreated, consolidated, and expanded as the data analysis process unfolds. This allows for the continuous coding of new data into emerging themes while simultaneously making changes to the thematic structure. In this study the iterative process of constant comparison was implemented and continued until three themes and associated subthemes were derived that best explained the experiences of the students in the SL program. These themes were refined and defined, and exemplar quotations were selected for illustration. The rigor of qualitative research is enhanced through methodological decisions intended to enhance the research design (Lincoln & Guba, 1985; Patton, 2002).

In the current study, trustworthiness was enhanced through data triangulation, insider-outsider perspective, and peer debriefing. First, data triangulation was facilitated by drawing upon multiple data sources (student reflections and resident/staff evaluations) and by collecting reflections from multiple students over a three-year period. Second, although the qualitative researcher’s involvement was independent of the primary data acquisition, he did discuss the analytic framework and resulting themes with the other two authors, who were audiology professionals and familiar with the course. This was critical to making sure that the themes were logical from an insider’s perspective. Finally, an expert in qualitative research not associated with the project served as a peer de-briefer. This individual reviewed the emerging themes throughout the data analysis process, provided comments, and challenged the researchers’ assertions.

Results

Hearing Screening

Residents of the assisted living facilities voluntarily completed a hearing screening prior to the first session. Table 1 shows the results of the hearing screenings over the three years of the program. Of the 81 individuals screened, only 8 passed the hearing screening.

Table 1. Hearing Screening Results

Screening Outcome	Year		
	2011	2012	2013
Completed	25	20	36
Passed	1	0	7

Assisted Living (AL) Participants by Activity

Some AL participants took part in all activities and others chose to participate in select programs. Table 2 summarizes the number of AL participants in each activity over the three years of the program. Overall, a total of approximately 60 AL participants took part in the aural rehabilitations sessions and 22 in the book club discussions. Only 5 staff members attended the presentations.

Questionnaire Returns

Those residents who participated in the aural rehabilitation sessions were asked to complete a survey. As shown in Table 2, of the 60 participants, only 19 surveys were completed in full and returned, a return rate of 32%. Residents were not required to complete a survey and many chose to take the survey with them and did not return it. Of the 19 questionnaires completed, all were from Serenity Retreat and 17 were from the most recent term, Summer of 2013. In 2012, residents took the surveys as they left each presentation, but none returned them, so in 2013 the residents were asked to complete the forms and turn them in immediately following the presentation rather than at a later date, which resulted in an increased return rate. Three participants completed questionnaires for the first aural rehabilitation session, 7 were completed for the second session, 5 for the third session, 2 for the staff presentations, and 2 from 2011 of the overall experience (no particular session was noted). Hearing screening and book discussion participants were not surveyed regarding their experiences.

Table 2. Number of Participants and Questionnaires across the Three Years

Activity	Year					
	2011		2012		2013	
	Participants	Questionnaires	Participants	Questionnaires	Participants	Questionnaires
AR Session 1	5	0	9	0	5	3
AR Session 2	5	0	11	0	9	7
AR Session 3	7	2*	2	0	7	5
Book Discussion	6	NA	13	NA	3	NA
Staff Presentation	(3)	0	0	0	(2)	(2)

Note. *Questionnaire from summary of the three session experience and not specific to AR Session 3, AR = aural rehabilitation, NA = Sessions not evaluated, () denotes non-residents.

Analysis of Daily Journals and Questionnaires

The results of the analyses of the student reflections across the 3 years revealed that the students who participated in the SL class generally enjoyed the experience. Comments such as “overall, I very much enjoyed the experience I had” (Ellen, 2013) (real names not used; year participated) and “I’m glad I was able to step out of my comfort zone off campus and try to help some individuals who need it” (Leah, 2012), are representative of the students’ impressions of the experience. Some students, such as Amber (2013) went as far as to say that “this experience effectively justified and solidified my passion for this field,” and Marla (2011) noted that “[this] may be one of my favorite classes so far. It was a positive experience that I hope every class has the opportunity to experience as well.” More specifically, the data analyses resulted in the construction of three themes and associated subthemes related to the students’ experiences during the SL program: building relationships, making a difference, and benefits of hands-on learning.

Building Relationships

The students who participated in the SL program during the three years of the study emphasized the importance of building relationships with the residents of the assisted living facilities. The theme of building relationships included the

subthemes of getting to know people, building trust, and feeling valued.

Getting to Know People

Students recognized the importance of getting to know residents with whom they interacted while at Serenity Retreat (2011 and 2013) and Dublin Hills (2012). Getting to know people on a more personal level was both a precursor to being able to give effective treatment and benefit of the experience. Following the second day at Dublin Hills, Gwen (2012) noted that the “book club was a challenge for me, but I feel like we were still able to make a connection with a more reserved lady, and another resident who wore hearing aids had good insights.” Ellen (2013) expressed excitement about how the SL experience allowed her to get to know residents on a more personal level: “I do not usually have much time to sit and chat with elderly adults, so it was nice to just sit and chat with one woman and just hear about her daily life.” Dana (2012) expected it to be more difficult to build relationships with some of the residents, “but many were willing to talk and were motivated to start conversations...it put me at ease that they were so open to talking about things.”

Several students made journal entries about specific interactions they had with residents while in the assisted living facilities. Writing about a woman she screened for hearing

loss, Dana (2011) noted that she was an “amazing woman to start with before we even got to start the screening! She told me about her husband and how he worked at sea next to loud machinery...she joked that she blamed him for her hearing loss because he had the volume on the TV so high.” Mindy’s (2012) sense of concern for a resident helped compel that resident to seek further assessment: “It took me expressing outward concern, but she finally did begin to ask more questions...[and] asked for the phone number of the clinic.” In communicating with a particularly emotional patient, Kim (2011) “found myself sharing with her that I want her to be able to continue to lead a full life. This was the most contact I have had with emotional topics in a clinical situation and it felt good to be able to offer some hope and be there to listen.”

Building Trust

Related to the notion of getting to know people, several of the students noted the importance of building trust with the residents. Due to the stigma associated with hearing loss, there was a general feeling among the students that they could not do their job effectively without first establishing a trusting relationship. Tammy (2013) explained that “there was some hesitation by some of the residents, as I am sure they thought we were there trying to sell them something...once they saw we were there to help them they were willing to at least listen to what we were doing there.” After her first day at the facility, Gwen (2012) recognized the importance of working to build trust: “I have a feeling that the residents will open up more and more as they get to know us and we build relationships with some of them. We just have to give it more time.” Following her last day at Dublin Hills, Gwen believed that was able to accomplish this mission. She explained that “by establishing relationships and changing our plans to fit the needs of the residents, I think we were successful in trying to help some people.”

Several of the students noted that one of the key things they took away from the SL experience was the need to build trust with patients. For many, these relationships began to develop after having spent some time in the assisted living facilities. Amber (2013) noted that she felt less like a stranger and “more like a welcomed guest” as the experience progressed. Ellen (2013) added that, on the second day, “our presence was much better accepted [sic] than last week. This reaffirms to me that going to visit the week before may be a way to show we are not there to sell something, but rather to learn and teach.” The need to build trust in the clinician-client relationship was a major take away point for Mindy (2012):

“Despite the fact that we are here to provide a medical service, it is probably more important that we establish rapport with these individuals and let them know that we

are not the “bad guys,” as sometimes may be the feeling with other doctors and service providers. By taking interest in the individuals for who they are, rather than what disabilities they have, it seemed like they were more receptive to recommendations that we made.”

Feeling Valued

For several of the students, an outcome of the relationships developed with and services provided to the residents was that they believed that the residents valued their time and effort. Comments such as “everyone at [Serenity Retreat] was gracious, kind, and receptive to the information and services we had to offer” (Marla, 2011), and “all of the residents that I screened were jovial and appreciated the work we were doing” (Jada, 2013) were representative of the students’ sentiments. Cindy (2013) was a little disappointed with the attendance at some of the events. However, she noted that, while only one individual attended book club on a particular day, “I think that the gentleman that did come appreciated the time that we spent with him...the screening on this day also dropped in attendance, but I do think those that came still enjoyed the experience.”

Jada (2013) explained that the sense of appreciation she felt from the residents made her want to go back again in the future: “it was gratifying to see the appreciation of the residents after each session we held. I honestly can see a few of us visiting [Serenity Retreat] in the future.” Several residents told the students that they were some of the most informative visitors that had ever visited the assisted living facilities. Kim (2011) was excited to report that “several of the attendees of our sessions stopped us to tell us that we were the best group of students to give these types of presentations and to thank us.”

Specifically related to the aural rehabilitation presentations, several students thought that the residents appreciated the information that was presented. Ellen (2013) noted that “I think the session went very well today. Participants seemed to enjoy the demonstrations.” Similarly, Kim (2011) explained that “The residents seemed to be really looking forward to the information [in the session] and I saw several taking notes.” The students’ feelings were affirmed by several resident comments on the evaluation forms. One resident wrote “enjoyed the presentation, thanks,” while a second noted “thank you for giving your time and knowledge to the [Serenity Retreat] residents. Others indicated that they were “impressed with the professionalism and knowledge of the presenters,” and “great presentation, great preparedness”. The residents’ overall evaluation of the sessions support the participants’ perceptions. On a 4-point, Likert-type scale,

the 17 residents who provided feedback rated their overall experience in the sessions as 3.82 ($SD = .39$).

Making a Difference

Important to the service component of the SL mission, students in this study found that volunteering audiology services at the assisted living facilities helped them feel as if they were making a difference in the lives of the residents with whom they interacted. The Making a Difference theme was divided into two subthemes that related to sharing information and impacting people's lives.

Sharing Information

In their reflections, students repeatedly described how they perceived that the information they shared with residents was valuable because it helped the residents improve their health and well-being. Mary (2011) wrote: "I think the presentation was well received by the residents and the questions that they had for us really showed that they all were able to get at least something useful out of all the information we had for them." Cara (2011) echoed this sentiment: "I was impressed by how much the residents had absorbed during the week! When we asked questions...they applied information that we had covered in earlier sessions." In reference to a presentation given to the staff at Serenity Retreat, Marla (2011) was encouraged that "the staff who attended obviously had some interest in the topic...ultimately, it is the residents who benefit from this because the staff is better equipped with the knowledge to help them."

Several of the students made comments specific to the sessions, which were the primary mode through which information was shared with the residents. Mindy (2012) noted that "I think the individuals who showed up [to the presentation] believed they had received good information, and it really meant a lot when they thanked us saying that we had made a big difference." Cindy (2013) added that "the session...went wonderfully! It was nice to see that the residents were interested and engaged in the session, and seemed to take away some useable knowledge."

Comments from residents on the evaluation forms affirmed the students' impressions that the sessions provided useful information. Several residents discussed learning about "new technologies" to assist individuals with hearing loss, and others provided more general comments such as indicating that they had "learned a ton of new ideas." Some residents provided more specific comments, such as "I now am more aware of many things that I can do to help myself hear better," and "[this] helped me learn different ways to help myself with my hearing problem...I was given the names of doctors that I

could go to...I needed this [information] since I am new to this area." Residents' evaluations of the sessions similarly confirmed the students' impressions. On a four-point, Likert-type scale, the 17 residents who provided evaluations rated the relevance of the information as 3.88 ($SD = .33$).

Impacting People's Lives

Beyond providing useful information, several of the students believed that they were able to impact the lives of the residents in a positive manner. In the words of Kim (2011), "I made a lot of connections and empowered people today to advocate for themselves and their needs." Kim (2011) explained how she believed that book club discussions helped participants connect better with one another. In her words, "all of the people were very engaging and had lots of stories and advice to share. It was great to see that they were learning from each other's experience as well as from our comments." One particularly moving event discussed by several of the students occurred during book club in 2011. In this session, one resident opened up to another about how hearing loss prevented them from becoming closer friends. Dana (2011) captured this moment especially well in her reflection:

"I think the take-away moment from today for me was when the woman with very little to no hearing loss turned to the resident with really only one good ear and said that "I have wanted to come and visit with you so many times, but didn't because I thought that would make you frustrated because of your hearing loss." I think they will form a great friendship...I am glad that we were able to help facilitate this moment of communication for them."

Several of the students discussed impacting the residents' lives in relation to self-advocacy skills. In reflecting on information she had provided a resident during a hearing screening, Mary (2011) "had the opportunity to counsel her... it was rewarding to see her light up with the knowledge that she can advocate for herself." In reference to a book club discussion, Violet (2012) thought "it helped to discuss the topic of hearing loss, communication strategies, and self-advocating. I believe this effort has at least kindled their minds to consider seeking professional support to manage hearing loss in the near future." During an individual consultation, Elise (2012) explained that she reminded an individual that he "needed to be an advocate for his hearing needs...I pointed out that we can ask our communication partner for assistance, such as writing something down and our partners will be more than willing to help us if we are polite and clear about our needs."

Benefits of Hands-on Learning

Another key element of SL is that students engage in activities that further their academic and civic development. Students who participated in this study articulated their sense of academic and civic learning through three interrelated subthemes: Breaking down pre-conceptions, applying what we have learned, and learning to work with patients.

Breaking Down Preconceptions

An important civic outcome of participating in the SL element of the course was that it challenged students' preconceptions of assisted living facilities and working with the elderly. Students who volunteered at both Dublin Hills and Serenity Retreat noted the luxurious nature of the facilities. In many cases, this challenged what they thought they knew about these types of facilities. Students referred to the facilities as "far from ordinary" (Amber, 2013) and others noted that the facilities were "grand and beautiful" (Kim, 2011). Several of the participants spoke more directly about how the facilities were drastically different from what they expected or had seen before. Marla (2011) explained that "growing up, my grandparents spent time in a nursing home and I've had bad connotations about nursing homes ever since. [Serenity Retreat] looked like a hotel...the atmosphere was friendly, warm, and inviting." Speaking about Dublin Hills, Mindy (2012) explained that she was "very impressed by how nice and clean the facility was. My grandfather was just released from a nursing home...it was grungy and had the stereotypical nursing home smell." Dana (2011) was impressed that Serenity Retreat seemed to have been designed with hearing loss in mind: "One thing I noticed was how great the general listening areas were. Almost 95% of the entire building was carpeted and many of the walls had some kind of wall hangings on them."

In addition to having their perceptions of nursing homes challenged, several of the participants also discussed how the experience helped them reevaluate their assumptions about the elderly. Kim (2011) explained that she thought that most elderly people lost hearing as they aged, but there were several people at Serenity Retreat who could hear very well. From her perspective, "It was great to see firsthand people who do not lose much hearing as they aged. They told me that they were not having any trouble hearing, but liked to have their hearing screened every year to check on it." Mary (2011) was similarly impressed with the residents' ability to critically discuss their hearing loss: "I was so impressed with their ability to relate difficulties they have with hearing to other difficulties, like walking. They were also able to see connections between why people do not seek help and the stigma that goes along with it." Mindy (2012) added that she

was "impressed with how attentive the residents were during the presentation we gave today."

Applying What We Have Learned

Several of the students noted connections between what they were learning through their coursework and their experiences in the assisted living facilities. Such connections are important in helping students to translate theories and concepts learned in the classroom to their practice as clinicians. Many of the students indicated that things they experienced "sounded familiar from class" (Mindy, 2012) and others noted that the experience was a "good review of things we have learned" (Ellen, 2012). Marla (2011) believed that she was able to "function as an independent audiologist with the assistance of [the course instructor]. It was the perfect opportunity to integrate the information I've learned in real-life practice." Related to helping people cope with hearing loss, Cara (2011) noted the importance of experiencing what had been discussed in lecture: "even though we can read about these emotions in books and hear about them in lectures, it doesn't really sink in as well as when you actually see patients who are in the different stages of grief."

Kim (2011) described a situation in which she was able to apply what she had learned while conducting a hearing screening: "She [the resident] told me that at her last hearing test she did not have enough hearing loss for hearing aids, but based on my screening she appeared to be a great candidate for an open-fit hearing aid." The SL experience helped students such as Cara (2011) understand how far they had progressed in their education. She explained that "[working at Serenity Retreat] helped me to realize truly how much we have learned about hearing aids. It felt great to be able to explain everything and answer all of the questions."

Learning to Work with Patients

Beyond helping students to apply what they had learned in lecture, the SL experience resulted in hands-on experiences that taught them a great deal about working with elderly adults and in clinical settings. In this way, the experience both related to and extended previous learning. In her final reflection, Amber (2013) explained that, "all in all, I'm so extremely grateful for this experience, because it gave me a taste of what being a professional feels like." Similarly, Mary (2011) noted that one session in particular was "great for all of us because he [the resident] had very good questions that really made us think about how to respond to questions in an easily understood, appropriate manner." Violet (2012) learned that "it is important to allow the patient to process the facts before providing the next steps. This will prevent any harsh

negative reactions toward the recommendations.”

Several of the students discussed lessons they learned specifically related to communicating with the elderly. Dana (2011) explained that she noted that a woman sitting near her in a presentation was not participating in an activity and “when I asked her if she had any questions she informed me that she just couldn’t see...she just needed my assistance.” Gwen (2012) emphasized the importance of using communication strategies that were appropriate for the elderly: “I enjoyed sitting in our little circle [during a session] and preferred it to speaking in front of a larger group...If I were to visit a nursing home in a similar position again, I think I would try to recreate this environment by having smaller groups.” Finally, Marla (2011) noted benefits related to the protracted nature of the experience: “it was especially helpful to get this type of hands-on experience working with elderly patients day after day for a week rather than a clinical experience for 3 hours once a week.”

Discussion

Over the past three years of using this SL model, various benefits have been observed by students and resident participants. The themes derived from qualitative data analysis included building relationships (getting to know people, building trust, and feeling valued), making a difference (sharing information and impacting people’s lives), and the benefits of hands-on learning (breakdown of preconceptions, applying what was learned in the classroom, and learning to work with patients). These data were consistent with previous work (Cokely & Thibodeau, 2011, Kaf et al., 2011) and add to the literature on SL in audiology coursework, providing further evidence of the benefits of SL, not only in academic learning, but also in interpersonal skill development and civic learning.

The SL model offered the opportunity for students to be engaged in the learning process and develop interpersonal and problem-solving skills while instilling the value of community service. Additionally, providing SL activities allowed community members (which included residents, staff, and others who were at the facility) to see the profession of audiology in a positive light. Assisted care living facilities were approached early in order to build rapport and aid in scheduling and this set the stage for professionalism. Working with two facilities created two new community partners for possible future engagement activities. These positive interactions provided residents and staff a glimpse into the audiology profession and the students gained perspective of one way to build positive relationships within a community.

Through the provision of presentations and book club discussions, students gained greater insight into the needs

of the adult population and their caregivers, as well as the opportunities available and the need for volunteers at assisted living facilities. The idea and nature of “volunteerism” is one that can be beneficial to those served as well as personally rewarding and enriching for the profession as a whole. Those who give back to the community can find a mutual positive exchange (Ellis, 2005). The “spirit” of volunteering can begin in graduate school with opportunities within classes. In the past 3 years, at least one student asked about ongoing volunteer activities at the assisted care living facility that were unrelated to audiology, but would not have been realized without this experience. This type of experience may serve as a stepping stone to additional volunteerism efforts at the local, state, or national level and can benefit the profession as a whole by putting it in a positive light.

Simply stated, this course was functional in that students applied classroom knowledge in a meaningful way that engaged and benefited assisted living residents. While theories were taught and foundational knowledge was addressed, this course content was presented in a way that was practical and applicable, where students engaged in the process by directly applying classroom knowledge in the real-world setting. At the end of the class, students created a portfolio of handouts, presentations, and discussion questions and were prepared to apply what they learned when the opportunity would present itself in the future. Students were encouraged to “make it personal” and plan for the future by appropriately preparing for the presentations, embracing the time afforded to listen to the stories of residents, and taking responsibility for their own education. When students were well prepared and took ownership of their learning, the presentations went well, the answers to questions came easily, and clinical decision-making was sound. If preparation was not complete, the students learned from this and made revisions prior to the next day to ensure a more successful experience for participants. If students did not take the time to interact with staff and residents, attendance at the planned events suffered. Therefore, students learned that when they engaged in their environment they were rewarded with interested participants.

The one-on-one and group engagement activities provided opportunities for students to develop greater interpersonal communication skills. In addition, the variety of formats required creative thinking and facilitated self-confidence in interacting in a planned presentation, as well as an unscripted book club discussion. Students learned to apply classroom knowledge quickly and effectively and had to answer questions or guide a discussion in a patient-friendly manner. Questions that arose often were related to personal struggles encountered by an individual that required students

to listen intently, ask necessary follow-up questions to better understand the problem, and offer potential solutions. These problem-solving opportunities were valuable clinical skills to develop and served as a first step in helping the students become successful clinicians.

Conclusion

Providing adult aural rehabilitation education using a SL delivery model has been beneficial to both students and community members. Students discovered a greater appreciation for the foundational concepts when given the opportunity to apply them in an assisted living facility. Additionally, residents, staff, and caregivers were able to view budding audiologists in a positive light. The overall conclusion of incorporating SL into the aural rehabilitation course was that the best classroom environment was the community facility itself and the best teachers were the residents, staff, and caregivers.

Limitations

Although this SL model was in place for several years, data were only been collected for the three years presented here. The number of students and participants were limited leading to a small data set. Continuing to expand this program to new assisted living facilities and collecting data for ongoing analysis and evaluation will provide additional insights into this learning model. In addition, consideration of a "control group" of students who do not participate in the SL portion of this course could provide additional insight into the value of the SL component.

Future Research

The daily reflections that students provided related to their experiences and observations and offered qualitative insights into individual growth and advancing self-awareness; however, the qualitative data could be strengthened by incorporating a pre- and post-assessment survey (with a control group) to measure interpersonal skills such as the Groningen Reflective Ability Scale (GRAS: Aukes, Geertsma, Cohen-Schotanus, Zwierstra, & Slaets, 2007). An additional measure for a qualitative approach would be to utilize the Reflective Ability Rubric (O'Sullivan, Aronson, Chittenden, Niehaus & Learman, 2010). In addition to adding a survey or assessment related to growth of interpersonal skills, an assessment of self-awareness administered before and after the experience could offer additional insight into personal growth that may occur related to the SL experience.

Many students reported in individual reflections that this SL component strengthened their desire to continue to find opportunities for volunteerism. Utilizing a scale such as the Community Service Attitudes Scale (CSAS: Shiarella, McCarthy & Tucker, 2000) prior to and following the SL component of this course would provide quantitative evidence of growth in this area.

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Appendix A

Session I Survey: Understanding Hearing Loss and Hearing Aids

Please take a moment to rate our presentation. Thank you for giving us the opportunity to speak with you.

Evaluation Scale: (1) Poor, (2) Fair, (3) Good, (4) Excellent

Overall Experience	1	2	3	4
Information				
Relevance	1	2	3	4
Clarity	1	2	3	4

How new was this information to you?

What was most helpful?

What was least helpful?

What would you like to see in future presentations on this topic?

Other comments/suggestions: