Spanish for Working Medical Professionals: Linguistic Needs

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Abstract: *This qualitative case study examined the Spanish linguistic needs of working health care professionals. Data from observation field notes, interviews, document analysis, and member checks were coded, triangulated, and analyzed following the premises of grounded theory. Results indicated that participants were able to produce routinely used words and common expression in Spanish, but were only able to understand isolated lexical items as spoken by native Spanish speakers. Their needs included written resources formatted for optimal use in the health care workplace, strategy instruction for lifelong learning, listening skills and strategies, and productive skills that go beyond semantic analysis. It was concluded that there is a need for second language acquisition (SLA) models that apply to nontraditional foreign language learning environments.*

Key words: *adult education, medical Spanish, nonclassroom learning environments, Spanish for specific purposes, strategy instruction*

Language: *Spanish*

Introduction

With ever increasing urgency, various professions call for their practitioners to use more than one language on the job in the United States. Voght and Grosse (1998) argued that foreign language education will have to "focus on the needs of the majority of our college students, who will not be educators, but businesspeople, international lawyers, medical professionals, social workers, and other professionals" (p. 9). According to Voght and Grosse (1998), language education that is related to the professional interests of learners attracts more students to study language because they see the connection between their career aspirations and second language (L2) knowledge (p. 11). However, the void between English-speaking professionals already working in their fields and their clients and colleagues who do not speak English continues to grow. These working professionals do not have access to the same kinds of academic programs as students preparing for their professions because of their limited time and resources. Working professionals have unique needs in two respects: the specific linguistic knowledge required for them to communicate with clients and the practical aspects of fitting language education into their professional lives.

Of particular interest in this study was Spanish language education for the health care profession, a field in which the need to close the communication gap between professionals and patients is urgent (González-Lee, 1992, 1998; Jonsson-Devillers, 1992; Kothari & Kothari, 1997; Mason, 1991). Large numbers of Spanish-speaking patients for whom "the utilization of health care services is largely affected by cultural beliefs, insurance status, language of communication, and income" (González-Lee, 1998, p. 324) are already filling clinics and hospitals throughout the United States. Even if professional schools and university language programs have begun to respond by addressing issues of language of communication for their students (González-Lee, 1992, 1998; Jonsson-Devillers, 1992; Mason, 1991), those already in the health care profession who are no longer college students need specific linguistic proficiency in order to successfully communicate with their patients.

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While the importance of real world applications of language learning is emphasized throughout the literature on languages in the professions, little research exists on those professionals who already reside in the "real world." In her chapter in the book *Spanish and Portuguese for Business and the Professions* entitled "Medical and Health Care Fields," González-Lee (1998) pointed to high achievement among university medical Spanish students who apply their studies in clinical settings, but nowhere is the reverse situation addressed, namely clinical settings in which motivation and the need to learn other languages and cultures may be high, but no formal instruction is available.

Recent media reports emphasize the increasing importance of multilingual communication in the workplace. In an August 20, 2002 *Washington Post* article, "Learning the New Language of Labor," it was suggested that bilingualism is the inevitable solution to communication problems in the workplace. The article cited one Maryland county that "at first hired bilingual Latino liaisons for different departments," but now acknowledges that it "need[s] people who speak more than one language" (Sheridan, 2002, p. A01). A June 22, 2002 *New York Times* article, "Limited English Can Hurt Patients," explores the communicative void in medical settings where English-speaking health care professionals are not always able to successfully communicate with non-English-speaking patients. The article reported that while local and state laws that enjoy varying levels of enforcement may require bilingual services or translation of vital documents, national government guidelines were not yet in place regarding services to limited English proficiency patients, which meant that "doctors rely on a patchwork of methods for communicating with patients who don't speak English," such as having nonmedical staff or relatives interpret or using flashcards (p. A01). Clearly, some level of communicative competence in the patients' language would contribute to the successful delivery of medical services.

When the ever-increasing population of Spanish speakers seeks medical care from English-speaking health care professionals, communication difficulties can complicate the delivery of patient services. The increased demand for medical professionals with communicative proficiency in Spanish ("Limited English," 2002) might put demands on various educational programs to prepare students to use linguistic and cultural knowledge in professions. The U.S. Department of Health and Human Services has issued federal guidelines for the rendering of Culturally and Linguistically Appropriate Health Care Services (CLAS). The standards call for access to information and services in patients' native languages as well as a diverse staff that receives ongoing education and training in appropriate linguistic and cultural provision of services in every institution that receives federal funding (Department of Health and Human Services, 2000).

Through close examination of one professional setting, this grounded study determined some specific limitations and needs of one group of health care professionals in their pursuit of Spanish language knowledge and proficiency in communication. The results could have implications for language programs seeking to serve the population of professionals and professional students who increasingly require such knowledge.

Research Methodology

For this research, a qualitative case study was used to provide an in-depth description of the linguistic needs of English-speaking health care professionals working with Spanish-speaking patients in perinatal clinics. Observations, interviews, document analyses, and member checks were used to develop a framework that would be useful in Spanish language and Hispanic cultures curricula for health care professionals. As the fieldnote and interview data were collected over a period of 7 weeks, the data were managed using NUD*IST software. The data were coded, triangulated, and analyzed following the premises of grounded theory.

Participants

The participants were a sample of the health care professionals (nurses, nurse midwives, and a nutritionist) working in the four public perinatal clinics in a large city in the Midwest part of the United States (see Table 1). Beth had been an obstetrics nurse since 1989. She worked on a hospital labor and delivery floor until 2 years prior to the study, when she began work at the perinatal clinic. Gretchen, the oldest participant in the study, was the newest to the field, having chosen nursing as a second career. She graduated from nursing school in 1993 and had been in her current job as a charge nurse at the clinics for 3 years. Bernice was a charge nurse at the clinics who had been in nursing for almost 30 years. She had worked in the perinatal clinics for a total of 10 years. Nancy, a nurse midwife, was the only practitioner (also called provider or clinician) who participated in the study. Nancy had been a nurse midwife for 18 years and had held her current job for 9 years. Kim was the nutritionist who worked at the clinic. Her role was to offer nutrition counseling to the pregnant patients as well as coordinate the distribution of food coupons.

Results

Communicative competence is at the heart of any study of oral communication in a natural setting, particularly when L2s are used. Oral proficiency and listening go hand in hand in a setting in which native English-speaking health care professionals attempt to communicate with native Spanish-speaking patients. Listening is clearly an important element in second language acquisition (SLA) since it is the primary source of L2 data for most learners, but one over which the listener rarely has control. This study considered

Table 1

PARTICIPANT PORTRAITS

Name	Position	Prior Spanish language experience	Uses of Spanish in the workplace
Beth	nurse	4 years, high school	patient interviews
Bernice	charge nurse	4 years, high school; 2 classes with local department of parks and recreation	patient interviews, initial visits (intakes), making appointments, coordinating care, telephone calls
Gretchen	charge nurse	high school; travel to Mexico as a child	patient interviews, initial visits (intakes), making appointments, coordinating care, telephone calls
Kim	nutritionist	high school; class with Health Department	nutrition counseling, distribution of food coupons
Nancy	nurse midwife	high school; class with a local department of parks and recreation	patient exams

language learners who had learned, as opposed to acquired, all the cognitive–informational oral proficiency they needed to produce, but lacked both social–psychological speaking skills and listening skills.

Perhaps because production for cognitive–informational purposes is the easiest need to identify, the participants in this study began by articulating those needs, but as the study progressed other communicative needs emerged. Kim, Gretchen, and Beth all wanted to expand on their fixed "scripts" (in this context, "script" refers to a set of fixed expressions used repeatedly by the participants in the clinic setting). It was from the first interview with Beth that the researcher started creating written scripts for all the staff, beginning with the postpartum interview sheet (see Appendix A). Bernice requested help with conjugating verbs in the preterite aspect of the past tense. Nancy literally had lexical gaps in otherwise complete sentences, needing words such as "since," "times," "gain," and "lose." Through triangulation of the data collected over the period of the study, the linguistic needs of the health care professionals have been divided into four categories, beginning with the easily identified productive needs and moving toward the more challenging receptive needs.

Pronunciation

In both her second and third interviews, Kim mentioned pronunciation as an important element in increasing her vocabulary: "I can list you tons of words that I would love to know . . . in Spanish, but what's the correct way of saying it?" The researcher observed several cases of mispronunciation, some of which interfered with communication. Most of Kim's pronunciation problems involved cognates, such as *cereal* and *vegetales* that she pronounced as she would in English. In the case of the word *estas* [these], which she was reading from the nutrition information sheet prepared by the researcher (Appendix B), she pronounced it like the Spanish verb *estás* [you are], probably because she was more familiar with the verb. Nancy often said "baby" instead of the Spanish, *bebé*, when asking if the baby was moving, but patients generally understood the word. A nurse who had asked a patient to write the Spanish word for "wait here," pronounced *quédate*, as *quita* [take away], a different word altogether. She had tried to write *quédate* phonetically as "kdate," but that did not help her when she used it. When Bernice was casually offering advice on bran cereals that would relieve constipation, she pronounced *estreñimiento* in such a way that the patient understood *entendimiento* [understanding].

Some existing medical Spanish texts begin with concise pronunciation guides that would help health care professionals learn the general pronunciation rules in Spanish. In her text, Bongiovanni (2000) provided a complete pronunciation and accentuation guide in less than two pages. Harvey (2000) included a similar guide in *Spanish for Health Care Professionals*.

Written Resources

At the start of the study, the participants were aware of their need for Spanish-language materials to distribute to the Spanish-speaking patients as well as written reference materials to refer to themselves. As important as having reference materials in Spanish was getting the necessary information into a form that was useful for each individual user. Computers were not deemed a practical resource because the participants did not have access to them during the work day and did not anticipate getting computers in the work-up and exam rooms in the clinics.

Spanish-language materials had been provided for distribution to patients by the time of data collection for this study. Gretchen said that the fact sheets were being prepared in Spanish when she started working in the clinics 3 years earlier. She emphasized the importance of having all written materials for distribution to patients prepared for readers with a fourth-grade education, regardless of lan-

guage background. Some fact sheets, like the bulleted list of four medicines that are safe to take during pregnancy, would be appropriate for someone with limited reading skills, while others, such as the letter to patients about the hospital tour, contained a lot of unnecessary formal language and unclear presentation of essential information.

All of the participants mentioned published reference materials as resources, though few actively used the resources they had. Bernice said "I have verb books at home and I lost my motivation to study." Bernice also had class materials from the courses she took at the local Department of Parks and Recreation. Beth had Harvey's *Spanish for Health Care Professionals* (2000) and two other reference books, but no longer used them. Gretchen said "I keep buying books and they sit there and occasionally I open one up." Nancy mentioned resources that contain phrases, verbs, and vocabulary, but added that they were only useful if one was in the conscious habit of using them.

The fact that so many written resources went unused by the participants in this study highlighted the importance of having the information they needed in a form that they could use without interrupting their work. Beth stressed that it would not be practical to interrupt a patient interview to find a book and look up a word or expression. Reference books were cumbersome to carry around and the participants in this study worked out of three different clinics with multiple workup and exam rooms in each clinic.

The researcher was able to maximize the participants' use of available written resources by reformatting available and existing materials. In the course of the study, the researcher worked with the participants to create portable references containing only materials they needed, such as the postpartum interview sheet (Appendix A), the nutrition information sheet (Appendix B), and the expressions for reception strategies in interactive listening (Appendix C). When Bernice saw the nutrition information sheet for the first time, she said, "that's what we really need!" and commented that Beth had been able to conduct a postpartum interview the day before without an interpreter because she had the postpartum interview sheet. Beth reported that the postpartum interview sheet she had taped to the table in her work-up room "helps a lot." When Kim was asked if the nutrition information sheet had been helping, she answered "I use it all the time, I must say." Identifying specific needs and then preparing written scripts was the most useful approach to increased output for this group of learners.

A Sense of Grammar

The success of the written scripts meant that participants could confidently use their productive abilities so that the focus of the study could shift to other areas of need. Most identified a sense of how the Spanish language "worked" as essential to their continued progress in learning Spanish. As Bernice said, "I have the words . . . [I] don't know how to make a smooth sentence." Beth wanted to learn "how to put things together to make sense a little bit better, because a lot of times I will know what I want to say [and] some of the words that would be in the sentences that I want to say, but not quite how to hook it all up." Nancy echoed Bernice's and Beth's sentiments when she said, "I tend to use a lot of paired words to get the message across more than full sentences." Nancy added that she preferred not to learn "something verbatim without having some sense of how to put it together because then it makes it harder to use it, to take those . . . verbs or . . . word[s] . . . and know how to put [them] into other sentences." As a practitioner, Nancy was less able to rely on a fixed script like the ones the nurses had. Some specific grammatical concepts that were problematic for the participants included register, pronouns, pro-drop languages, and verb conjugations.

Bernice expressed concern that she might offend patients by mixing the formal (*Usted*) and informal (*tú*) registers. Bernice occasionally mixed registers, as when she asked a patient informally if she had received medicine (*¿recibiste medicina?*), if she was taking it twice a day (*¿tomas dos veces al día?*), and then tried to switch to formal, asking, "*¿Ud. tiene…*," [Do you (formal) have . . . ?], but could only produce the informal indirect object pronoun, *te:* "*¿el doctor te dio una receta para una crema?*" [Did the doctor give you (informal) a prescription for a cream?]. In another case, Bernice corrected herself, starting to ask in the informal register, then switching to the formal: "*¿estás, no Ud. está interesado en información para planificación de la familia?*" [Are you (informal), no, are you (formal) interested in information on family planning?]. An informal possessive pronoun, *tu*, caused Nancy to mix registers when she created the question, "*¿Usted sabe cuando fue tu última regla?*" [Do you (formal) know when your (informal) last period was?].

Bernice struggled with the use of direct and indirect object pronouns. In her first interview she correctly articulated the difference between "they told you" [*te dijeron*] and "they told me" [*me dijeron*], but said she was confused "when the *le* and the *la* or the *lo* are in front of the word." In her third interview, Bernice reported that she had been practicing the pronouns and had an opportunity to demonstrate when a masculine direct object pronoun (*lo*) was used to replace the feminine word for "box" [*la caja*] in the sentence "*lo venden por un dólar*" [they sell it for a dollar]. She asked, "so isn't it *la*?" demonstrating her understanding of the use of gendered, third-person direct object pronouns.

Nancy struggled with the reflexive use of *se* in the expression "*¿se mueve el bebé?*" [Is the baby moving?]. In her first interview she said, "when I learned the phrase '*se mueve el baby*' . . . what the heck is *se*? . . . I don't know how to use it anywhere else. That's part of a verb, right?" Later

in the same interview, Nancy asked, "when I say, '*se mueve el baby*' . . . does that mean 'Is your . . . ?'" and there was a discussion of *se* being part of the reflexive verb, allowing for a distinction between something moving itself and someone actively moving something. The subject came up again in the clinics the next week. Nancy had written "*se mueve el bebé*?" and asked, "does this mean 'is the baby moving?'" as she began to write "is" above the word *se*. Again, the researcher explained that *se* is part of the reflexive verb. In the second interview Nancy said she understood the reflexive *se* and when asked if she had been able to recognize it in any other contexts, she immediately thought of *ojalá que se mejore pronto* [hopefully you will get better soon].

Because the clinic staff wanted to make "more complete sentences and speak more smoothly," they were confused by the fact that Spanish is a pro-drop language that does not require explicit statement of the subject to form a complete sentence. In this respect, their confusions arose from the fact that their language skills were better than they thought. In her first interview, Nancy talked about "*¿tiene contracciones?*" [are you having contractions?] and other expressions with *tener* [to have] seeming to be incomplete sentences because she thought she was saying "have contractions?" By the time of her second interview, she had a sense that the subject did not have to be explicitly stated and that the simple present could imply the English present progressive. Another nurse expressed surprise that "*¿tuviste?*" was the Spanish equivalent of all three English words, "did you have?" She quickly understood that explicit statement of the subject was not necessary when the researcher illustrated that a Spanish verb, when conjugated, clarified the subject, unlike English.

Verbs posed the biggest obstacle to comprehending Spanish grammar, perhaps because they are not fixed lexical items and they have to be conjugated in various tenses to enable communication. For example, Beth said she knew a lot of verbs as vocabulary items, but did not know how to conjugate them "to make sense." Likewise, Gretchen said verbs were "what always get me really hung up" and spoke for her colleagues as well when she said "I think that's where we feel our weakness is." In her first interview, Bernice said it would be nice to have a verb resource that showed her how to say "did they tell you?" "did you take your medicine?" "did you . . . ?" She explained that she might use a verb, conjugating it in the wrong tense, but still communicate the meaning, adding "but it would be nice to do it right." In her second interview, she provided the example of communicating "did you sleep last night?" by conjugating the verb in the present and then adding "last night" [*¿duerme anoche?*] while gesturing with her head to indicate past. Kim reported doing "everything in the present tense because I figure maybe they'll at least understand kind of," but she acknowledged that "if you say, 'I'm going to go do it to you' or 'did you go do it?' there's a big difference in communication versus what I say ['go']." Nancy also said she would like to learn to conjugate verbs, adding that she needed to review verb tenses in general: "when you get into talking about all the different tenses and conjugations, I don't remember what they are even." Nancy and the researcher discussed that in Spanish present tense can be the equivalent of the English present or present progressive so the Spanish "*¿tiene?*" could mean "are you having?" or "do you have?" The subject came up again in the clinic, both with the verb "*tener*" [to have] and the verb "*tomar*" [to take]. The researcher explained that both "*¿tomas?*" and "*estás tomando?*" mean "are you taking?"

Nancy, Bernice, and another nurse in the clinic all requested information on how to use the present perfect and future in Spanish. The researcher explained the use of "*ir a* + infinitive" to express the "future" to Nancy and the other nurse so that they could use it with any verb. Bernice had learned the same information in the class she took at a local Department of Parks and Recreation. For Nancy and another nurse, the researcher provided present perfect as a fixed expression, writing "have you had?" and its Spanish equivalent, "*ha tenido?*" on a card. Bernice said she already knew that information, but did not know how to form the present perfect in general. The researcher quickly explained it and then at Bernice's request provided infinitives for her to conjugate orally in the present perfect.

Most of the clinic staff was satisfied with trying to use the present perfect to get information from the patients about the past. Bernice often tried to use the preterite aspect of the past tense, though she struggled with it, as the above example of her attempt to ask, "did you sleep last night?" illustrated. She thought she heard patients and interpreters saying "*dicieron*" for the English, "they said." The researcher explained that that would be a regular conjugation of an irregular verb, roughly the equivalent of saying "we goed" instead of "we went" in English. She had learned *fue* and *fui* and said it was convenient that they meant both "to go" and "to be" in the past. She was able to conjugate some regular verbs in the preterite, such as when she asked a patient if she received [*recibiste*] and when she said that she had discovered [*descubrí*] something.

Listening Needs

Perhaps the most problematic need of the participants involved their receptive abilities. The participants were all able to speak to the patients better than they could understand the patients, creating a communicative imbalance. The participants were metacognitively aware of this imbalance. When the researcher and patient were discussing the advantages of having a baby in the summer, Bernice joined in, "see—*mi problema, no entiendo mucho*. Did you say it's better to be pregnant in winter?" Gretchen acknowledged

that "90% of what the patient is saying in Spanish, I don't understand." In her first interview, Beth said "I don't need . . . to talk a whole bunch. I need to be able to understand what I get back from the patients," adding that "it doesn't do much good to . . . know how to ask a question if you can't understand what they say back." Kim said, "I'm not used to hearing it be spoken so I'm . . . more learning how to listen." Later she concluded that " . . . it's all about the listening." Nancy said she often neglected listening: "I so often tend to think about the information that we have to give out that . . . you can forget about the whole aspect of needing to be able to hear and understand more, too."

When discussing how much she had learned in the course of the study, Nancy said "I've learned a little bit more in the speaking than the listening realm. And I've found that sometimes if . . . I've gotten pretty good with several lines, then . . . somebody will give me this real long, involved answer," thinking she knows more than she does. Nancy also suggested that sometimes so much concentration was focused on asking questions in Spanish that she forgot the importance of trying to understand the responses of her patients. In her third interview, Kim reported an improved ability to communicate with Spanish-speaking patients with the nutrition information sheet (Appendix B), but also said that "it leads them to believe I know a little bit more." Later she added that "they think [I] know a lot more so then they talk a little bit more and I don't understand it." As Nancy's and Kim's comments demonstrated, the productive aspect of learning was an issue of memorizing "lines" or "scripts" like an actor—an approach that did not work for the receptive aspect of learning and might mislead the interlocutor as to the proficiency of the speaker.

The participants could describe the spoken Spanish that they could and could not understand. All were concerned with accuracy, emphasizing the importance of being able to understand all the details of what a patient said. Bernice said she can understand "little, short phrases" and "yes/no" answers, but nothing "too complicated or too deep." Nancy said, "sometimes I get short answers and then I can get them, but it's more the long, involved answers that are, like 'wait a minute, that's outside my realm.'"

Beth went into more detail on the limits of understanding. She could understand "yes/no" answers and single-word details about where—"my back" or when—"at night," but when patients added details like, "right before I go to bed," she could not understand them. Similarly, Bernice understood "Friday" and "early" when trying to make an appointment for a patient, but did not get the details that she was available early in the day on Fridays. Bernice also noted that she communicated more easily with the "quiet" patients: "my observation is that the best learning experience for me is with the quiet ones because if they're talkers like me and they start blabbing . . . ."

Because the necessary listening skills could not be acquired through provision of fixed scripts to be memorized, the expressions for reception strategies in interactive listening (Vandergrift, 1997; see Appendix C) that the researcher provided might not have been as useful as the scripts prepared for production. However, by using expressions such as "*más despacio, por favor*" [slower, please] or "*por favor, ¿puede repetirlo?*" [can you please repeat that?], participants confirmed that they had been able to elicit the information in a form they could understand, therefore allowing the communicative interaction to continue.

In her third interview, Beth reported success with using "*más despacio, por favor*" in two respects. First, she said when the Spanish-speaking patients "slow down and repeat it or say it a different way," she was able to understand more. Second, by using the expression, she was able to communicate that she was "having a little trouble understanding them," thus conveying the important information that her receptive skills were not as strong as her productive skills in Spanish.

In Kim's third interview, she said that her improved production skills with the nutrition information sheet (Appendix B) gave her the confidence to try the expressions for reception strategies in interactive listening (Appendix C). She reported asking Spanish-speaking patients questions such as, "what did you say?" "what was that?" and "what word did you use?"

Through the study Nancy was made more aware of the importance of listening and working on ways to improve that aspect of communication. In her third interview she described an interaction in which she initially did not understand the patient, but was able to use reception strategies in interactive listening:

> I asked her to repeat it . . . more slowly. And pulled out pieces and then she . . . realized that I was really . . . trying hard to listen and so she kind of rephrased some of the things to make it a little more simple and more slow and . . . we got through it.

Use of reception strategies was particularly important for telephone communication. Talking on the telephone lacked the important paralinguistic aspects of face-to-face conversations. Additionally, when a patient called the clinic, she was in the position of soliciting information from the staff, instead of the other way around as was customary in clinic interactions. As a result, the staff found that they needed more listening skills in a situation in which they had less support from paralinguistic cues and less control over the interaction. In one instance, a patient's call to the nutritionist resulted in noncommunication because the patient hung up before the communicative difficulty could be resolved. She went to the clinic in person, where the situation was resolved and she received the services she sought.

Bernice and Gretchen were able to use strategies for interactive listening and background knowledge to get enough basic information from a caller before seeking an interpreter. Bernice said in her second interview that she started phone conversations by asking "what's your name?" and "are you pregnant?" to activate her own background knowledge. In one case in which a patient was calling for an interpreter who was not available, Bernice was able to take a message, though she had to solicit repetitions. In another instance, she asked the researcher to take the call, but she correctly reported that she thought it was a particular patient she had been unable to have her intake appointment the previous week because she had not had proper identification with her. Similarly, Gretchen asked the researcher to interpret for a phone call that she thought was from a patient she had sent to the emergency room earlier that morning. The strategy of soliciting basic information before asking the patient to hold for an interpreter allowed for a sustained interaction over the telephone; however, the participants also expressed concern over the accuracy of their understanding.

All participants were reluctant to guess without confirming in some way that they had understood accurately. Bernice said sometimes she guessed and was pretty sure she was right, but added "it's not fair to the person to not be 100% sure." Bernice usually relied on interpreters to clarify or confirm her understanding. Beth said she also used interpreters to "make sure I get for sure what [the patients] are saying." Nancy identified the primary need of the participants in this study when she said "I still need to bump up a little bit more and really try to hear a little bit better . . . understand a little more that's spoken."

Implications

The study participants first identified easily rectified linguistic challenges such as lexical gaps, pronunciation problems, and a need for written resources in appropriate forms. Once those needs were addressed, participants moved on to a more problematic need, which they articulated as a "sense of how the Spanish language works." This desire to be able to create with the language instead of using fixed scripts that they only understood at the semantic level meant they were starting to move beyond their semantic gaps and address their syntactic gaps. In accordance with Swain's output hypothesis, repeated use of the "scripts" had resulted in productive automaticity, but as Swain was careful to point out "speaking just to speak is not enough" (1993, p. 159). It is only when learners try to actually create with the language that they move from purely semantic processing to syntactic processing, in part by identifying gaps in their knowledge. Swain asserted that there is a "noticing/triggering function of output" which "has a consciousness-raising effect that focuses learners on 'gaps' or problems in the ways they conceptualize the L2 system" (Grove, 1999, p. 819). Nancy's ultimate understanding of reflexive verbs and Bernice's work with register, the preterite aspect of the past tense, and direct and indirect object pronouns illustrated the process described by Swain (1985). The other three participants started using reception strategies for interactive listening, but did not attempt to create comprehensible output with the language.

Possibly because the participants functioned in Spanish by first memorizing fixed expressions for productive purposes and understanding only a few isolated spoken words for receptive purposes, the following comprehensible input model did not apply in the clinic setting: input → intake → developing linguistic system → output. Swain (1985) suggested that input aids language acquisition when it is provided in an "interaction where meaning is negotiated" (p. 246). Most of the participants in the present study used Spanish primarily to provide nonnegotiable information instead of to truly interact with Spanish-speaking patients. For this group of learners, output seemed to be both the starting and ending point in terms of language acquisition.

Grenfell (2000) noted that successful learners were "active and positive about their language learning, building up a base competence which they developed over a period of time" (p. 12). The language learners in this study were all active and positive, but they lacked a Spanish communicative base competence. Development of listening strategies was particularly important to the participants in this study because their deceptively fluent speaking did not reflect their limited listening capacity.

The need for an understanding of grammar and the fact that participants were able to acquire enough productive skills to say almost everything they needed professionally without commensurate acquisition of receptive skills also showed that despite significant productive abilities and exposure to the spoken language, no linguistic system seemed to develop. Part of the reason for this might be that the English-speaking medical professionals were usually in the interlocutor role of interviewers, which differed from a natural setting in which a learner would be in various, frequently changing interlocutor roles. For these participants, the development of linguistic competence was contingent upon both receiving input in a comprehensible form and producing comprehensible output. At the conclusion of the study, participants had begun to solicit comprehensible input from patients through use of reception strategies in interactive listening. This increased interaction with the patients might lead to more comprehensible output through "meaningful (contextualized) use of one's linguistic resources in the process of negotiating meaning" which also provides "opportunities to test out linguistic hypotheses to see if they work" (Grove, 1999, p. 819).

While present SLA theory is certainly relevant to this case study, theory that assumes a classroom environment may result in models that do not apply to nonclassroom language learning environments. SLA researchers will have

to develop theories and create models specific nontraditional language learning environments.

Conclusion and Recommendations

The working health care professionals in this study needed more input and more strategies for dealing with input, as well as a move toward understanding the L2 system. All participants mentioned in formal interviews and informal discussions in the clinic their need to know how to use verbs as more than lexical items. They suggested that a better understanding of verb conjugations might provide a sense of grammar that would allow them to create with the language, all of which is consistent with Swain's output hypothesis (1993).

Any formal instruction would have to account for the fact that the working professionals in this study did not have time or resources to study language for the sake of studying language. A coordinated effort with the employer and the teaching institution could alleviate concerns about both time and money if a joint funding scheme were employed and an onsite location were chosen for weekly class meetings. Various authors in the field of English for specific purposes have suggested conducting language courses as close to the workplace as possible. Crandall (1984) suggested making the classroom into a simulated workplace in order to integrate the language and the "specific purposes." Other authors have suggested that the best place for a language course for specific purposes is the workplace itself (Holliday, 1995; MacDonald, Badger, and White, 2000; Svendsen & Krebs, 1984). According to MacDonald et al., (2000), onsite teaching does not disrupt the natural context of language for specific purpose courses in the same way a pedagogic site does. Holliday (1995) asserted that onsite language training also allows it to be better integrated into the workday.

For medical Spanish, the workplace context might allow for methodological flexibility by keeping the focus more on the specific purposes and less on the language. As early as 1977, Allwright and Allwright were warning against "the dangers of generalizing from one learning/teaching situation to another" (p. 58). Since then, several researchers have emphasized that the content of courses for specific purposes should be relevant to the field of interest to avoid a mismatch between what is learned in class and its usefulness in the workplace (DeBeaugrande, 2000; Fincham, 1982; Mavor & Trayner, 2001). Students should be prepared "for the realities, rather than merely the theories, of the workplace" (Mavor & Trayner, 2001, p. 355) while instructors should be aware of the language demands faced by their students and target the specific linguistic challenges faced by the students in their context (Shi, Corcos, & Storey, 2001; Svendsen & Krebs, 1984). However, focusing on linguistic needs may not be enough when it results in a goal-oriented approach to teaching in which learners acquire adequate production abilities, but are still unable to communicate with their interlocutors (Widdowson, 1981), as was the case with participants in the present study. A language course for specific purposes should concentrate on issues of communication through use of a process-oriented approach in which learning how to learn is more important than learning how to produce specific linguistic forms.

An added advantage to language classes in the workplace is that the instructor would both gain familiarity with the work of their students and discover the communicative difficulties confronted by their students. In this way, teachers would be better able to integrate the course with the specific workplace challenges related to communication with Spanish-speaking patients.

A course designed to help working professionals develop communicative competence should include a focus on strategy instruction for lifelong learning, extensive practice with listening and listening strategies, and an approach to production in the classroom that focuses on spontaneous conversation for social–psychology as well as informational–cognitive purposes.

Instead of using class time to practice pronunciation and acquire relevant productive vocabulary, students should be referred to appropriate resources and aided in formatting that information for optimal use in the workplace. This allows for a focus on listening comprehension and strategy instruction. In addition to the reception strategies in interactive listening provided to the participants in this study, a class could include audio, video, and live native speakers role-playing patients. Students could engage in work-related dialogues, beginning with skeletal dialogues based on audio and video "patients" and working toward spontaneous dialogues. Students should determine specific content of the course based on their needs. For example, in each class meeting students might make two lists: "triumphs"—Spanish words or expressions that they understood since the last class meeting; and "challenges"—Spanish words or expressions that they heard, but were unable to understand. As a follow-up to the challenges, the instructor could help the students develop an understanding of the linguistic system by explicitly addressing the grammar behind things that they repeatedly say and hear in the workplace. In other words, students would try to "discover what they do not know" (Swain, 1985, p. 293) throughout the work week, then bring those gaps in their knowledge to class, where the tasks would help students "externalize their knowledge and obtain relevant feedback from their peers and their teacher" (p. 287). In this study, examples included discussions of reflexive verbs, the lack of the auxiliary verb "to do," the nature of pro-drop languages, the use of the present perfect tense, and the expression *ir a* + infinitive to express future. Some participants were able to articulate their knowledge gaps to the

researcher in order to obtain an explanation and were subsequently able to report cases of their use in the clinic.

Explicit discussion of strategy use will equip students to continue learning beyond the classroom because they will be able to metacognitively control strategy use in the workplace (Ellis, 1994; Mendelsohn, 1998; Oxford & Nyikos, 1989). Deciphering grammar as a way to analyze frequently used language can be taught as an explicit cognitive strategy. Students should be made aware that they deploy cognitive strategies every time they guess, test a hypothesis, or summarize. In practice dialogues, students should be taught to use specific social and compensatory strategies such as rephrasing, making inferences and circumlocution (Chamot & O'Malley, 1994; Oxford, 2001; Rost, 2001; Rost & Ross, 1991).

The results of the present study have practical pedagogical implications as well as theoretical implications for SLA researchers. From the practical perspective of teaching language for professional purposes it is important to focus on strategy instruction for lifelong learning, reception and receptive strategies, and the development an approach to production that involves comprehensible output resulting from syntactic analysis. From the theoretical perspective of SLA researchers, this study shows the need for SLA models that apply to nontraditional, nonclassroom environments.

References

Allwright, J., & Allwright, R. (1977). An approach to the teaching of medical English. In S. Holden (Ed.), *English for specific purposes* (pp. 58–62). Mansfield, UK: Modern English Publications Limited.

Bongiovanni, G. L. (2000). *Medical Spanish, (3rd ed.)*. New York: McGraw-Hill.

Chamot, A. U., & O'Malley, J. M. (1994). Language learner and learning strategies. In N. C. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 371–392). London, UK: Academic Press.

Crandall, J. (1984). Adult ESL: The other ESP. *English for Specific Purposes, 3,* 91–96.

DeBeaugrande, R. (2000). User-friendly communication skills in the teaching and learning of business English. *English for Specific Purposes, 19*, 331–349.

Ellis, R. (1994). *The study of second language acquisition*. Oxford, UK: Oxford University Press.

Fincham, M. (1982). Hospital communication. In A. Waters (Ed.), *Issues in ESP, Vol. 5*, (pp. 63–98). Oxford, UK: Pergamon Press.

González-Lee, T. (1992). *Teaching models and language materials in Spanish for the education of health care providers*. Paper presented at the Annual Eastern Michigan University Conference on Languages and Communication for World Business and the Professions, Ypsilanti, MI.

González-Lee, T. (1998). Medical and health care fields. In T. B. Fryer & G. Guntermann (Eds.), *Spanish and Portuguese for business and the professions* (pp. 323–338). Lincolnwood, IL: National Textbook Co.

Grenfell, M. (2000). Learning and teaching strategies. In S. Green (Ed.), *New perspectives on teaching and learning modern languages* (pp. 1–23). Clevedon, UK: Multilingual Matters, Ltd.

Grove, C. (1999). Focusing on form in the communicative classroom: An output-centered model of instruction for oral skills development. *Hispania, 82*(4), 817–829.

Harvey, W. C. (2000). *Spanish for health care professionals (2nd ed.)*. Hauppauge, NY: Barron's Educational Series, Inc.

Holliday, A. (1995). Assessing language needs within an institutional context: An ethnographic approach. *English for Specific Purposes, 14*(3), 115–126.

Jonsson-Devillers, E. (1992). *Medical Spanish training program for the education of health care providers: Communicative needs and cultural competence*. Paper presented at the Annual Eastern Michigan University Conference on Languages and Communication for World Business and the Professions; Ypsilanti, MI.

Kothari, M. P., & Kothari, V. (1997). Cross-cultural healthcare challenges: An insight into small American community hospitals. *Journal of Hospital Marketing, 12*(1), 23–32.

Limited English can hurt patients. (2002, June 22). *The New York Times* [online serial] Available: http://www.nytimes.com/aponline/national/AP-Immigrants-Language.html.

MacDonald, M., Badger, R., & White, G. (2000). The real thing?: Authenticity and academic listening. *English for Specific Purposes, 19*, 253–267.

Mason, K. (1991). Medical Spanish for majors: Open wide and say "yes." *Hispania, 74*(2), 452–456.

Mavor, S., & Trayner, B. (2001). Aligning genre and practice with learning in higher education: An interdisciplinary perspective for course design and teaching. *English for Specific Purposes, 20*, 345–366.

Mendelsohn, D. (1998). Teaching listening. *Annual Review of Applied Linguistics, 18*, 81–101.

Oxford, R. (2001). Language learning strategies. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 163–172). Cambridge, UK: Cambridge University Press.

Oxford, R., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal, 73*(3), 291–300.

Rost, M. (2001). Listening. In R. Carter & D. Nunan (Eds.) *The Cambridge guide to teaching English to speakers of other languages* (pp. 7–13). Cambridge, UK: Cambridge University Press.

Rost, M., & Ross, S. (1991). Learner use of strategies in interaction: Typology and teachability. *Language Learning, 41*(2), 235–273.

Sheridan, M. B. (2002, August 20). Learning the new language of labor: Spanish instruction increasingly geared to the workaday world. *The Washington Post*, A01.

Shi, L., Corcos, R., & Storey, A. (2001). Using student performance data to develop an English course for clinical training. *English for Specific Purposes, 20*, 267–291.

Svendsen, C., & Krebs, K. (1984). Identifying English for the job: Examples from health care occupations. *English for Specific Purposes, 3*, 153–164.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input and second language acquisition* (pp. 235–253). Rowley, MA: Newbury House.

Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *Canadian Modern Language Review, Golden Anniversary Issue, 50*(1), 158–164.

U.S. Department of Health and Human Services. (2000). Recommended standards for culturally and linguistically appropriate health care services. *Assuring cultural competence in health care: Recommendations for national standards and an outcomes-focused research agenda*. Available: http://www.omhrc.gov/clas/ds.htm

Vandergrift, L. (1997). The Cinderella of communication strategies: Reception strategies in interactive listening. *Modern Language Journal, 81*(4), 494–505.

Voght, G. M., & Grosse, C. U. (1998). The development of Spanish and Portuguese for specific purposes in the United States. In T. B. Fryer & G. Guntermann (Eds.), *Spanish and Portuguese for business and the professions* (pp. 7–22). Lincolnwood, IL: National Textbook Co.

Widdowson, H.G. (1981). English for specific purposes: Criteria for course design. In L. Selinker, E. Tarone, & V. Hanzeli (Eds.), *English for academic and technical purposes: Studies in honor of Louis Trimble* (pp. 1–11). Rowley, MA: Newbury House Publishers.

Appendix A

Postpartum Interview Script

¿Cómo se llama el bebé?	What's the baby's name?
¿Cuánto pesó el bebé al nacer?	How much did the baby weigh at birth?
¿El bebé recibió cuidado especial en el hospital?	Did the baby get special care at the hospital?
¿Ud. y el bebé salieron del hospital juntos?	Did you and the baby leave together?
¿Le da de pecho, biberones, o los dos?	Breastfeed, bottles, or both?
¿El parto fue espontáneo o provocado?	Spontaneous or induced?
¿Le dieron medicina por el suero para aumentar las contracciones?	Pitocin?
¿Tuvo un parto vaginal o cesáreo?	Vaginal or C-section?
¿Problemas con el parto?	Problems with the delivery?
¿Le dieron medicinas al salir del hospital? ¿Cuáles?	Did they give you medicines at discharge? Which ones?
¿Le dieron inyecciones en el hospital?	Did you get any immunizations?
¿Le duelen los senos? ¿Tiene bolitos?	Do your breasts hurt? Any lumps?
¿Le cortaron?	Episiotomy?
¿Tiene puntadas?	Do you have stitches?
¿Le sanó?	Is it healing?
¿Está sagrando?	Are you bleeding now?
¿Ha tenido una regla?	Have you had a period?
¿Tiene estreñimiento? ¿diarrea?	Do you have constipation? Diarrhea?
¿Tiene dolor o ardor cuando orina?	Does it hurt or burn when you urinate?
¿Está triste? ¿Está deprimida?	Are you sad? Are you depressed?
¿Cuál método anticonceptivo piensa usar?	What birth control method do you plan to use?
¿Ha tenido relaciones desde que nació el bebé?	Have you had sex since delivery?
¿Usó un método anticonceptivo?	Did you use contraception?
¿Tiene una clínica para el bebé? ¿Dónde?	Do you have a clinic for the baby? Where?

Appendix B

Nutrition Information

¿Ha tenido WIC antes?	Have you had WIC before?

WHAT IS WIC?
WIC es un programa de nutrición para mujeres, bebés y niños menores de cinco años. Usted recibe información sobre nutrición y cupones para comida gratis.

WIC is a nutrition program for women, infants and children under five. Participants receive nutrition information and coupons for free food.

WHAT YOU NEED TO BRING:
Usted necesita una identificación con su fecha de nacimiento y un talón de cheque del último mes.

You need an ID with your date of birth and pay stub from the last month.

IDENTIFICATION CARD
Primero, necesita la identificación para el programa. Firme aquí. Escriba los nombres de hasta dos otros adultos que pueden usar sus cupones. Por ejemplo, su esposo, su hermana. Necesita la identificación para usar los cupones en el supermercado.

First, you need the ID for the program. Sign here. Write the names of up to two other adults who can use your coupons. For example, your husband or sister. You need the ID to use the coupons in the grocery store.

FOOD ITEMS

Estas [és-tas] son las comidas que puede recibir con los cupones:	These are the foods you can get with the coupons:
Un total de 36 onzas de cereal; puede ser una caja [ká-ha] de 36 onzas; o 3 cajas [ká-has] de 12 onzas cada una; o una caja de 24 onzas y otra de 12 onzas.	A total of 36 ounces of cereal; that can be one 26-ounce box, three 12-ounce boxes, or one 24-ounce box and one 12-ounce box.
Frijoles o mantequilla de maní	Beans or peanut butter
Un gallón de leche	A gallon of milk
Una docena de huevos	A dozen eggs
Queso	Cheese
Jugo líquido o helado	Frozen or liquid juice

SUPERMARKETS
Los supermercados que aceptan los cupones son Meijer, Kroger, y Big Bear. Aquí hay una lista.

The grocery stores that accept WIC coupons are Mejier, Kroger, and the Big Bear. Here is a list.

HOW THE COUPONS WORK
Hay cuatro cupones por mes, es más o menos un cupón por semana. Tiene que usar los cupones entre esta fecha [first date] y esta fecha [second date].

Con cada cupón se puede comprar las comidas que están en el cupón: (examples)

There are four coupons for each month; that is about one coupon per week. You have to use the coupons between this date [indicate written date] and this date [indicate written date].

With each coupon you can buy the foods that are on the coupon: (show examples on the coupon).

Appendix C

Reception Strategies in Interactive Listening

Más despacio, por favor.	Slower, please.
¿Mande? / ¿Cómo?	What? Pardon me?
Por favor, ¿puede repetirlo?	Can you please repeat that?
¿Qué significa _____?	What does _____ mean?
¿Me lo puede explicar de otra manera?	Can you explain it another way?
¿Cuál fue la última palabra?	What was the last word?
¿Me puede dar un ejemplo?	Can you give me an example?

Source: Vandergrift, 1997