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### Recommended Citation

Pérez, María E. (2020). Integrated curriculum design: Outcomes of a two-week Spanish intensive course for nursing students. *Global Business Languages*, 20, 126-156.  
Available at (DOI): <https://doi.org/10.4079/gbl.v20.8>

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## INTEGRATED CURRICULUM DESIGN: OUTCOMES OF A TWO-WEEK SPANISH INTENSIVE COURSE FOR NURSING STUDENTS

### ABSTRACT

This article analyzes the outcomes of an intensive Spanish course for nursing students of various Spanish language abilities. The course objectives were to enable the students to conduct a nursing assessment interview and data gathering in Spanish, as well as providing instructions and recording information for vital signs and a head-to-toe physical exam. Treating these interactions as standard communicative frames, utilizing Goffman's (1974) schema, guided the course development. Vocabulary and grammar were restricted to the needs of the assigned tasks, and concentrated on speaking and receptive abilities, not on writing or reading. The course was successful in achieving the stated course objectives, and students demonstrated basic communication skills and the ability to perform the assigned tasks in Spanish at the end of the course.

**KEYWORDS:** curricular design in Spanish for Specific Purposes, interdisciplinary collaboration in foreign language studies, medical Spanish, pedagogy for medical Spanish, Spanish for Specific Purposes

Although there is acknowledgement of a growing need for bilingual Spanish healthcare workers, most STEM field disciplines continue to exempt language courses as part of the preparation of future professionals. The issue becomes urgent once the students enter their professional tracks and begin interacting with Hispanic clients: thus the demand for “quick and easy” medical Spanish courses. According to the literature most of these courses are not successful in achieving their purpose, as students are already overtaxed by their program requirements, including class and clinical course work. Chatterjee (2015) described an online course for medical residents that could be completed at the chosen pace of the students, but that still had low levels of completion, additionally Lear (2005) described a course for practicing nurses which was successful in achieving production of memorized phrases but was low on reception skills. Considering the high level of complexity of healthcare interactions, which require advanced language skills to offer advice, provide instructions, educate on disease management and treatment as well as life style modifications, and to support clients and their families with empathy and cultural understanding, there is increased evidence for teaching medical Spanish courses at the advanced level, post-intermediate general Spanish courses and prior to the beginning of professional studies (Belpoliti and Pérez, 2016; Hardin, 2015; Morín, 2010; Sánchez-López, 2013). Similarly, Martínez (2010) has further highlighted the inability of bilingual Heritage Language (HL) students to properly communicate medical information in Spanish, while also stressing the importance of not just acquiring medical vocabulary but using language that is accessible to the patient population, thus including a culturally nuanced perspective that requires advanced skills.

Other studies have shown that language and cultural barriers contribute significantly to health disparities in the Hispanic population (Martinez, 2008; Pew Research Institute, 2009 ), which in turn can be thought to be a contributing factor to the higher costs of health care for this population, as treatment becomes the focus of health interventions instead of prevention, which is often delivered too late in emergency care settings. Additionally, according to the National

Assessment of Adult Literacy (NAAL) of 2003, Hispanics have the lowest health literacy of any ethnic group in the United States, which impacts the individual's ability to obtain, process and understand basic medical information. Health literacy affects lifestyle decisions, such as diet, exercise, alcohol or drug consumption, and smoking. It also impinges on the person's capacity and understanding of when to seek health care, to follow a treatment plan, and to make lifestyle changes.

Given the exponential growth of the Hispanic population in recent years, representing 56.6 million according to the US Census of 2016, it becomes clear there is a need for Spanish speaking health professionals to successfully communicate with Hispanic patients. To address this need, the Office of Minority Health has provided a template for improved health care for minority populations with the development of the Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (CLAS Standards), most recently revised and enhanced in 2013. The principal standard addresses the rights of patients to receive health care services in their preferred language, in culturally appropriate interventions and at their corresponding level of literacy, while the second standard addresses the need to improve the education of health professionals, preparing them to serve a diverse population, thus responding to demographic shifts that do not guarantee that English would be the patient's language. While these standards offer a blue print that could improve health care with a different approach to the preparation of future health professionals, there remains little provision for language courses during the undergraduate years.

Furthermore, as Hardin (2015) has described, there is not much consensus regarding the standard curriculum for medical Spanish courses. Her survey of courses found in academic literature from 1977 to 2015 included a vast array of courses from undergraduate, to graduate and post-graduate courses, with great variation in respect to the course objectives, instructional time frames, and curriculum. She specifically noticed a lack of true evaluation of course effectiveness, as memorization of medical phrases or vocabulary were often considered as indication of success, with not clear evaluations of the stated objectives, which often concentrated on oral proficiency. In turn, Belpoliti and Pérez (2016) have described an advanced course of Spanish for the health professions that focused on cultural competency and communication and demonstrated the need for inclusion of pragmatic and sociolinguistic skills in the curriculum, which required addressing these skills through specific pedagogical strategies, even for advanced students, whether SH or second language (L2) students. Therefore, these studies seem to indicate a need for higher language skills for successful communication.

However, as Hardin (2015) also points out, there seems to be a lack of collaboration and awareness of their respective disciplines between language instructors and those in the science and health related fields. A different focus and perspective, in addition to already overloaded curricula in the professional preparation years, and other demands in the undergraduate years as the students face increasing competition in admission standards, which require shadowing, research and volunteer activities, as well as the high cost of university education, may have further contributed to the elimination of language requirements for many of the STEM disciplines. Given this reality, Spanish for the health professions instructors continue to receive requests for short term, intensive courses that focus on oral communication, and that can be more easily accommodated in the students' schedules. Although this is not ideal, the challenge to introduce Spanish language skills to healthcare workers offers the possibility of providing basic language skills that can supplement or complement the work of medical interpreters, as well as to plant the seed for future more advanced studies in the language. This study responds to the development of such a course for nursing students at The University of Houston College of Nursing during their short summer hiatus.

## STUDY DESCRIPTION

The University of Houston College of Nursing started a second-degree bachelor's degree program at the Sugar Land campus in 2014. This is an intensive, twelve-month, full-time program to facilitate a career change for those that already hold a bachelor's or a master's degree in another field to become nurses. The accelerated program has had great success in their first two years of implementation, and their students have had a 100% first-time pass rate on the national nursing licensure exam (NCLEX-RN), compared to 84% nationwide and 85% for the state of Texas respectively for the years 2015 and 2016. Enrolled students attend four consecutive semesters beginning in January, in addition to a two-week summer "mini-mester," which offers the only window of opportunity for elective courses since the target graduation date is December of the same year in which they begin their studies.

This study will analyze the outcome of an intensive Spanish course for students of different Spanish abilities that was developed and implemented during the two-week summer "mini-mester" in 2017. Eligible students had completed a nursing assessment course that included a patient intake questionnaire with demographic and health information, taking vital signs and conducting a head-to-toe physical exam. The Spanish course was modeled on the language required to perform these tasks, considering that the standard nature of the interactions limited the communicative options and facilitated the achievement of the goals in the proposed time span. It also assumed that the students would easily relate to the objectives in Spanish since they had just completed the course in English. Repetition of the course is also thought to improve the skills of physical assessment by offering the students an additional opportunity to practice their assessment skills—but in Spanish. The focus of the course makes it very unique in its integration of nursing and Spanish skills' objectives.

Curricular design questions included:

- What is the best approach and focus of the curricular design to successfully achieve the communicative objectives?
- What vocabulary and grammar structures would be needed to accomplish the tasks? How would the faculty member evaluate the students' Spanish language level?
- How would the course objectives be best evaluated?

The central research question was:

- Will students with little or no prior exposure to Spanish be able to conduct a nursing assessment interview including demographic and health data, take vital signs and complete a head-to-toe physical exam in Spanish at the end of a two-week intensive language course?

## METHOD

### CURRICULAR DESIGN AND APPROACH

The curricular design was based on the premise that the types of interaction for the proposed tasks fitted a model of standard actions and expectations on the part of the players: health professional and patient, in specific situational interactions, following Goffman's (1974) schema of frames of communication. Considering that a limited range of variation could be expected for

communication, the curriculum was developed assuming limited if any Spanish ability and restricted the content to basic grammar structures and language.

Due to the time limitations: three face-to-face hours per day, five-times a week for a two-week period, the teaching approach differed from the emphasis on the four skills: reading, writing, speaking and listening, to concentrate on speaking and listening abilities. The World-Readiness Standards' five Cs of Foreign Language Learning (National Standards Collaborative Board, 2015) were adapted and integrated in the curriculum throughout the teaching experience. Culture was introduced through a discussion in English of cultural beliefs and practices about health and illness, as well as addressing the diversity of the Hispanic population in the United States, including different norms of politeness which were used to compare and contrast with the cultural norms in the United States. Since this type of discourse required a language ability above the expectations for the course, it was solely conducted in English. Community connections were established by visiting a local Hispanic market and exploring the types of foods available, engaging with the sales staff in Spanish, and exploring and discussing the interactions the students had had with Hispanic patients in their previous nursing rotations.<sup>1</sup>

No textbook was utilized since none was found to address the specific needs and time constraints of the course. The nursing content was adapted from the course in English and organized in modules that incorporated the vocabulary and grammar needed for the tasks. The modules were uploaded to the course management system Blackboard with the expectation that students would study the assigned vocabulary and grammar, completing the homework exercises in writing prior to coming to class. Class time was dedicated to reviewing the homework and practicing role-playing scenarios. Equal emphasis was placed on production and receptive skills, and there was a Spanish speaking nursing instructor in the classroom besides the language instructor to provide students with the experience of communicating with another native speaker. Additionally, videotapes were made and uploaded on Blackboard exemplifying the scenarios with "actors" who were native speakers from Spain, Mexico and Cuba. Quizlet.com, an online platform, was also used for vocabulary, providing extra practice with pronunciation and flash card exercises. This platform offered the option to develop course specific vocabulary, and it was free and easily accessible to the students. Careful attention was given to providing plentiful and authentic input, with daily comprehension quizzes at the beginning of class, following Krashen's and Terrell's (1983) Natural Approach. For a complete description of the modules see Appendix A.

Students had two practical exams where they had to complete specific tasks that were videotaped and evaluated as their main grade, one practicum was a nursing assessment interview and the other one was on vital signs, head-to-toe physical exam and diet history. Native Spanish-speakers acted as patients for the nursing assessment interview, and students switched acting as patients in the physical exam and vital signs evaluation. Students were provided with a template in English and Spanish of all the questions that served as a rubric for evaluation. On the day of the exam they were provided only with the English version of the tasks. They had to produce the questions in Spanish, understand the patient answers in Spanish, to then record the patient answers in English, which was quite complex but consistent with the process they would follow in real practice. They also had two written exams over the same material with some questions provided verbally to evaluate oral comprehension.

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<sup>1</sup> The opportunity to practice obtaining patient information at a local safety-net clinic was incorporated to the curriculum in 2019, providing real-life scenarios with Spanish-speaking patients for the students.

## GRAMMAR AND VOCABULARY

Students learned medical vocabulary and were introduced to decoding strategies, such as the meaning of prefixes and suffixes derived from the Latin, which are common in medical nomenclature. Students were also made aware of the use of cognates to ascertain meaning, as well as some false cognates that they would commonly encounter.

For each of the modules new vocabulary was introduced according to the communicative requirements. For example, for the module on demographic data gathering, students had to learn numbers, family relations, occupations, days of the week, months of the year, greetings and introductions as well as interrogative words in Spanish. The grammar was limited to what was needed to perform the tasks: the present tense with the addition of the present perfect to obtain the past medical history information. For the physical exam, commands were introduced to give instructions need such as lie down, open your mouth, take a deep breath, etc. The verbs used were also restricted to those needed to perform the tasks, and only used in the two-person interaction forms, although students were provided with full conjugation patterns on the grammar section of the modules. The formal *usted* was used in all the interactions, which simplified conjugation, but also granted an equal status and respect to the patients. Overall, the realization was made that more language was needed than just “learning the medical vocabulary,” even when performing strictly medical functions, and the students’ skills at the end of the two-week period were comparable to a basic Spanish language level, at least in speaking and listening ability.

## RESULTS

### ASSESSING LANGUAGE ABILITY: PARTICIPANTS’ INFORMATION

No prior information was provided on the Spanish language ability of the students before the beginning of class. On the first day of class students completed a pre-test which included medical vocabulary and general Spanish vocabulary at a beginner to low-intermediate level. The test was then repeated at the end of the course with the addition of some opinion questions regarding perceptions of the effectiveness of the course. See Appendix B for the pre and post-language survey. There were nine students in the class, including four HLs and five L2 students. Table 1 provides the information on the HL students and Table 2 provides the information on the L2 students.

Table 1. *HL Student Profiles*

I.D.	H.S. Spanish	College Spanish	Spanish Language Use	Self-assessment of language proficiency
1	1 yr.	0	Frequent, friends and family	Advanced
2	3 yrs., AP	0	Seldom, when visiting extended family	Superior
3	0	9 hr. CLEP credit	Seldom, when visiting extended family	Advanced
4	0	0	Seldom.	Superior

Table 2. *L2 Student Profiles*

I.D.	H.S. Spanish	College Spanish	Spanish Language Use	Self-assessment of language proficiency
5	2 yrs. Basic	Intermediate online course	0	Beginner
6	3 yrs. Pre-AP	0	0	Beginner
7	0	0	0	No previous Spanish.
8	2 yrs. Basic	0	Very little, at work.	Beginner
9	3 yrs. Intermediate.	0	0	Intermediate

Most of the L2 students self-rated their Spanish language skills at the beginner to intermediate level, with one student reporting no previous exposure to the language. None had studied Spanish beyond the intermediate level, and none reported using the language in their daily interactions.

Students came from different career paths, but most of them had a background in science and or health related disciplines, see Table 3 for a list of previous fields of study.

Table 3. *Fields of study*

Previous degree	Number of students
Hotel & Restaurant Management	1
Community Health Education	1
B.A. Multidisciplinary Studies	1
Psychology	2
Kinesiology/Health Promotion	1
Biology	2
Health Sciences	1

## INITIAL LANGUAGE SURVEY RESULTS

The language survey was developed at a basic language level, incorporating some of the medical vocabulary needed for performing the designated tasks that were the objectives of the course. Not surprisingly, there was great disparity between the results between the HL and L2 students. Please refer to Table 4 for the results of the HL Initial Language Survey and to Table 5 for the L2 initial language survey.

Table 4. *HL Initial Language Assessment*

Student I.D.	Previous language study	Perceived ability	Correct answers/	% Correct
1	1 yr. H.S.	Advanced	18/21	85
2	3 yrs. H.S.	Superior	19/21	90
3	CLEP exam credit	Advanced	18/21	85
4	No formal language instruction	Superior	20/21	95



Table 5. *L2 Initial Language Assessment*

Student I.D.	Previous language study	Perceived ability	Correct answers	% Correct
5	2 yrs. H.S. One Intermediate College	Beginner	11/21	52
6	3 yrs. H.S. Pre-AP	Beginner	13/21	62
7	No language exposure	No language ability	3/21	14
8	2 yrs. H.S.	Beginner	4/21	19
9	3 yrs. H.S.	Intermediate	13/21	62

The HL students performed at a consistent range scoring from 85–95 in the initial language survey; performing above the beginner’s level, which was the target level of the evaluation. However, there was a wide range of abilities in the L2 population, scoring from 14 to 62 in the survey. Even though there was variation, the highest score was considered below the beginner’s level.

Although the HL students demonstrated higher language skills in the pre-test, the course objectives were kept the same, considering that the focus was on specific communicative tasks related to nursing functions, for which most of the HL students had acknowledged lacking the skills to successfully perform in working with Spanish-speaking patients.

#### EVALUATING COURSE OBJECTIVES

Course objectives were evaluated on a formative and summative basis. As part of the formative assessment, a vocabulary quiz was given daily at the beginning of class, testing the vocabulary that would be used in the lessons of the day. The vocabulary quiz was developed as a comprehension test, where students had to write in English the meaning of words or phrases from a dictation in Spanish. This was useful in stressing the importance of studying the modules and completing the homework prior to the class meeting. Written exercises on grammar and vocabulary were also assigned daily, and students received a homework grade. Role-playing scenarios were purposefully not graded, since the objective was to encourage participation and oral practice. Students had the models from the videos that were developed for the class, but also modeled after each other within the limitations of vocabulary and grammar provided.

The summative assessment mainly consisted of the two main practicums: the nursing interview (see Appendix C), and the vital signs / head-to-toe physical exam with diet history and dietary recommendations (see Appendix D). Students had a day of practice with each other prior to the actual evaluation with Spanish speakers that acted the patient role. For the nursing assessment patients were provided with symptoms of asthma, urinary tract infection, and diabetes. For the physical exam, we used symptoms of constipation, hypertension, and obesity. Students were randomly assigned to one of the disease scenarios and had to obtain the appropriate information from the patients’ cues. The assessments were conducted in close to real-life scenarios, in a simulation patient examination room, and videotaped.

All the students were successful in communicating with the patients and obtaining the correct information that was written down and turned in to the professor at the end of the experience. Students had a maximum of 30 minutes to complete the task, and the time of the interactions ranged from 18–30 minutes, demonstrating thoroughness and the ability to communicate in Spanish for an extended period. The process involved multiple language transfers, since students requested information or provided instructions in Spanish, received the patient’s answers in Spanish and then recorded the information on the patients’ chart in English. The students also demonstrated politeness and respect for the patients, who were addressed in the formal *usted* form, and the use of the commands was softened by the inclusion of “por favor” and “gracias,” upon the completion of the requests. The videos were individually reviewed with each of the students, which served as an additional learning experience. Table 6 and Table 7 show the grades earned in the practicum exams and the comparison between the pre- and post-language assessment grades.

Table 6. *HL Practicum, Language Survey results*

Student I.D.	Practicum I	Practicum II	Language Survey I	Language Survey 2	% Shift
1	95	94	85	95	10
2	95	97	90	100	10
3	93	95	85	95	10
4	100	96	95	100	10

Table 7. *L2 Practicum, Language Survey results*

Student I.D.	Practicum I	Practicum II	Language Survey I	Language Survey 2	% Shift
5	87	90	52	95	43
6	92	93	62	90	28
7	89	95	14	90	76
8	85	91	19	90	71
9	92	94	62	90	28

Most importantly, the comparison of the pre-test and post-results demonstrated significant differences between the incoming knowledge and the outcome at the end of the class. The shift was particularly impacting for the L2 students, who performed nearly at the same level of the HL students upon course completion. All the students on average performed in the 90% or above range.

Students also completed a written test and a comprehension test as part of the summative assessment with grades within the 85–100 range, with most of the scores in the mid-nineties. The written tests consisted of multiple choice or fill in the blank answers, therefore should not be considered as a true reflection of writing ability in Spanish. However, the results closely correlated to the production/receptive skills that were evaluated in the practicum exams and were used to further reinforce those skills.

#### OPINION EXIT QUESTIONNAIRE SUMMARY

Additionally, students were asked to answer additional opinion questions regarding their perceptions of course effectiveness and suggestions for future improvement (see Appendix E). This tool was useful in informally assessing the overall strengths and weakness of the course, as well as the perceived benefits to the students. All the students evaluated the course positively and identified listening and speaking abilities as the most improved skills, which were the intended results of the course. According to the exit questionnaire the students were satisfied with what they had achieved in the course and felt the class had met their expectations. The final section was open for comments and suggestions. Several students made a comment about the time frame, suggesting it would be better to extend the course beyond the two weeks allowed, which is not feasible within the present scheduling limitations. Even though the students had a wide range of Spanish proficiency, all of them acknowledged profiting from the course.

Table 8. *Opinion exit questionnaire*

I.D.	Course expectations	Most valuable	Least valuable	Most improved skill	Communicative ability before	Communicative ability after
1 (HL)	Above expectations	Medical vocabulary	Cultural competence	Speaking	Fair	Good
2 (HL)	Above expectations	Medical vocabulary	Written homework	Speaking	Good	Excellent
3 (HL)	Above expectations	Medical vocabulary	Written homework	Speaking	Fair	Good
4 (HL)	Completely	Medical vocabulary	N/A	Listening	Good	Excellent
5 (L2)	Completely	Role playing scenarios	Cultural competence	Listening	Minimal	Fair
6 (L2)	Completely	Medical vocabulary	Role playing scenarios	Listening	Minimal	Fair
7 (L2)	Above expectations	Role playing scenarios	Cultural competence	Listening	No language exposure	Fair
8 (L2)	Completely	Medical vocabulary	Role playing scenarios	Listening	Minimal	Fair
9 (L2)	Completely	Medical vocabulary	Written homework	Speaking	Minimal	Fair

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Student I.D.	Practicum I	Practicum II	Language Survey I	Language Survey 2	% Shift
5	87	90	52	95	43
6	92	93	62	90	28
7	89	95	14	90	76
8	85	91	19	90	71
9	92	94	62	90	28

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Table 9. *Students' comments and suggestions*


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 Comments. Suggestions
 

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HL-I wouldn't change anything. I felt the curriculum is appropriate for the length of time we have in this class. Thank you!

HL-Maybe make two groups from the beginning so the Spanish speakers get homework more focused on advanced medical vocabulary.

HL-I think this course would be great if it were at least twice as long. I like the roleplaying but I think testing out with the head to toe is a big expectation for two weeks. I think a longer course would allow for continued use of the vocabulary which would help with retention. If possible, in the future, maybe as a clinical, volunteer at a health fair or some clinic where can put some of these skills into real life use. I enjoyed the course very much and learned a lot. It was very useful to me.

HL-I am quite impressed with this course. It not only allowed students without a background in Spanish to acquire a significant amount of Spanish to use in the clinical setting, but also allowed Spanish speakers to ability to hone in and improve/adjust their current language skills. Fun! Informative! Interesting! Highly recommend!

L2-Overall I feel like this course has made it to where I will be able to hold a conversation with a patient about their medical care.

L2-More time to learn more stuff. Practice saying basic dialogues in class.

L2-It was well taught in the time frame that was provided.

L2-A lot of information was covered and a good amount of medical vocabulary is now available to the students.

I would recommend that future students have at least a basic level of Spanish.

L2- The instructions for the evaluation could be a little more elaborate so that it is easier to understand what is expected.

The evaluations (\*Nursing interview, Vital signs and Physical exam) are a great component of the course and they really allow you to put your skills to the test.

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## ANALYSIS

## PRE- AND POST-LANGUAGE SURVEY

It is to be noted that none of the HL students had taken a Spanish course in college and reported infrequent use of the language. Several expressed they had been motivated to take the course after realizing they could not effectively communicate with Spanish-speaking patients during clinical practices, even though they self-rated their Spanish skills in the upper ranges. This

experience was consistent with Martinez (2010) observations of bilingual students being unable to accurately communicate medical information. Thus, the expectation to perform in a professional field in Spanish seems to have been assumed by the bilingual students.

During the first two weeks of class, the initial assessment seemed to accurately reflect the language level of the L2 students, but not so much the abilities of the HL students, who could perform at a higher level, at least in speaking and receptive abilities. Therefore, the challenge to develop a more specific assessment for HL students would need to be addressed in the future.

Regardless of the level in the initial assessment, all the students performed at the 90–95 range on the post-language survey, with positive shifts of 10% for HL students and a range of 28–76% for the L2 students. The language survey served to supplement the course evaluations with a measurement of before and after skills since it had been developed around the communicative functions that were the object of the course. It also provided basic information about the students, their previous exposure and education in Spanish, as well as a self-rating scale of ability. This information was important to the instructor who prior to the first day of class had no information of the students' levels of ability in Spanish, which is very different from structured language courses that have a built-in system of pre-requisites and/or placement tests. Therefore, a flexibility in the approach to the course might be required when instructors do not have the expected hierarchical structure in place. The opportunity to reach a non-traditional audience of healthcare professionals requires adaptations to their needs, and further reassessments as the course develops.

## COURSE EVALUATIONS

The mix of L2 and HL students proved to be an asset, allowing pairing speakers who had native or near-native pronunciation and everyday language skills in their repertoire with the L2 students. It also seemed to reinforce the skills of the HL students, who acted as mentors to the L2 students. Although there has been a robust body of research pointing to the benefits of differential tracks of instruction for second language and heritage language students, in the author's experience in advanced Medical Spanish courses, there are benefits to both groups in such pairings. Carreira (2012) has described the complimentary function of these interactions past the intermediate level of instruction; in the case of Spanish for Specific Purposes, it provides the HL students with an opportunity to validate their linguistic and cultural skills, erasing many of the insecurities that interfere with the use of Spanish by heritage learners, which also have been amply documented in academic literature (Ducar, 2012; Potowski, 2012).

While most L2 instruction avoids the use of translation to focus on the target language, in this class the expectation was for students to move back and forth between the two languages. Students were introduced to professional medical terminology in Spanish, but also to the language commonly used by a variety of Spanish speakers.

Students elicited and received information in Spanish, but charted this information in English, which is consistent with nursing practice. This translanguaging ability was manifest during both Practicums, where students demonstrated the ability to successfully communicate with patients in Spanish and to translate this information accurately to their patient records in English, which is the expectation in actual practice. The L2 students scored at the 87–92 range in the nursing interview (practicum 1), which was more complex in terms of language since they had to elicit and comprehend demographic information, personal and family history, past history and a full review of systems, as well as activities of daily living and lifestyle information. The HL students scored slightly higher on the same task at the 93–100 range. For the head-to-toe physical exam (Practicum 2), the L2 students scored at a higher level than on practicum 1, in the 90–95 range, and the HL students scored at the 94–96 range, showing a leveling of both groups.

This second practicum consisted mostly of the use of the commands to give patient directions and the use of ‘voy a’ to indicate what the nurse would be doing next, which required less patient linguistic interventions and was mostly focused on actions by the patient or the nurse. Both practicums were the main sources of evaluating the key skills that were the expected outcomes of the course.

Strategic competence was an area that was emphasized as the course developed. Strategic competence was defined as the verbal and non-verbal communication strategies to compensate for communication breakdowns and to negotiate meaning (Canale and Swain, 1980). Besides learning the use of cognates and Latin-derived words, they learned how to politely request repetition to express lack of understanding, to use non-verbal communication, and to request that patients write down words that they did not understand or that were new, to then proceed to look-up the word on an online platform such as Google translate to find the English equivalent. Double-checking and verifying information was also stressed, as obtaining and recording the correct information can be crucial in medical situations. This has been identified as a significant contributor to medical errors, and one of the pitfalls of incomplete language proficiency, or knowing “a little Spanish” (Flores, 2006). Thus, shedding inhibition and developing the self-confidence to communicate even when not fully commanding the language, but at the same time being conscious of language limitations and the importance of double-checking patient information was one of the course accomplishments.

The daily homework and quizzes provided additional measurement of attainment of course objectives and was useful in keeping the students on track. The written tests were used to reinforce the learned material for the practicum exams and were not intended to measure writing ability in Spanish. All of the evaluation activities in addition to the pre and post-survey information were used to measure the students’ progress and abilities, demonstrating a positive outcome regardless of the course’s time limits.

## OPINION EXIT QUESTIONNAIRE

It is interesting that in the post-test, the HL students self-evaluated their starting communicative ability at a lower level than in the pre-test, however, they also described achieving a good to excellent level at the end of the course. This second assessment could reflect a more accurate evaluation, since they also had informally acknowledged lacking the professional medical vocabulary to successfully interact with Spanish-speaking patients. The challenge remains to develop Medical Spanish assessment tools for higher levels of the language and specifically for HL students. Having more precise initial assessments could facilitate of students more accurately targeted instruction according to the HL students’ language levels. On the other hand, the L2 students were consistent in the assessment of their language abilities. A long-term follow-up would also assist in determining whether students retain and continue to use the skills learned in the class.

Although cultural competence did not seem to be a key issue for the students according to this survey, with the linguistic component as the priority, it might be a topic that could become more relevant as they further their professional practice and would help them to better relate to Spanish speaking clients. In that regard, an expansion of the curriculum to include a clinical practice with a Hispanic patient population would be desirable. Other students expressed that a differentiated course for L2 and HL students was needed, taking into account the wide range of abilities.<sup>2</sup>

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<sup>2</sup> The course has been successful in two other sessions in the years 2018 and 2019. Student suggestions have been incorporated in the curriculum. In 2018 the curriculum was expanded for the four of the HL enrolled students in a



## CONCLUSION

My objective was to document the challenges and what to expect out of a two-week intensive Medical Spanish course. As previously mentioned, the objectives were restricted to specific functions which the students had recently mastered in English. Although the L2 students had more limited language skills, they could still accurately perform the tasks learned and could engage in short conversations in Spanish.<sup>3</sup> The HL students were an unplanned asset to the course as they provided a source of authentic vocabulary and pronunciation for the L2 students. In turn, the HL students developed medical vocabulary and professional competence in Spanish, skills which had not been part of their language repertoire. Although the HL students did not mention it in their written comments, they verbally expressed to the instructor that they had felt pride in their professional use of the language. For most of the HLs, Spanish was a language that was rarely used, which had been left behind as they transitioned to educational and professional contexts. However, once they started their clinical practices, they began to see the value of Spanish, and the need to expand their repertoire to a professional level in medical Spanish. This experience was similar to what Martínez (2010) had documented with HLs in the Rio Grande Valley, whom gained pride and confidence in a language that had previously been stigmatized. Furthermore, they also increased their confidence in class as they served as mentors to their L2 peers. The discussion of cultural practices and beliefs was enriched by their contributions and facilitated the participation of some of the L2 students who came from different cultural backgrounds, who also described their own norms, which benefited the entire group.

This course presented the opportunity for interdisciplinary collaboration and responded to the identified needs and priorities of the College of Nursing. The language and situations were not randomly selected for their linguistic value but determined by the performative aspects of the selected nursing functions. However, it was also recognized that students had to command language beyond the medical terminology to effectively obtain the information needed in the patient interview and to complete the physical exam. Thus, the language skills closely correlated to a basic's Spanish level at the end of the two weeks.<sup>4</sup> Although medical Spanish online courses abound, it was felt that the face-to-face instruction provided abundant practice for developing the communication skills needed and responded to the unique demands of the delineated nursing curriculum. The students' sense of achievement and motivation to continue to expand their Spanish abilities indicate the need to provide non-traditional language learning opportunities to healthcare professionals that might not be able to engage in traditional language education courses. It requires flexibility and adaptation on the part of the language instructor and continued assessment and reevaluation of the program to meet the needs of a diverse student body in terms of language ability.

It is also important to highlight that language pedagogy for medical Spanish should follow the nature and process of the professional interactions that require continuous translations between the two target languages, which is quite different from the focus of second language instruction whose main goal is the exclusive use of the second language. Medical professionals

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class of 14 students. Students completed module expansions in the areas of Pediatrics and OB-GYN, which were the following clinical rotations. In 2019 the curriculum was expanded to include practice at a safety-net clinic. In contrast with the students in this study, the 2019 cohort ranked the cultural competence activities at the top of the most valuable for the course after directly interacting with Spanish-speaking patients.

<sup>3</sup> Anecdotal evidence from students' emails indicates that even those students with less language ability have been able to use their Spanish skills to benefit patient care during their clinical practices.

<sup>4</sup> The fact that students could achieve a basic language level in two weeks is quite an accomplishment, which is the equivalent of courses typically taught over 1–2 long semesters.

need to communicate medical information in Spanish, be able to comprehend the patients' input in Spanish, to then record the information or communicate this information to other professionals in English. Considering the diversity of the Hispanic population in the United States, dialectal differences and literacy levels present additional challenges in selecting the most appropriate language when working with Hispanic patients.

The course demonstrated that basic communicative skills and the ability to perform the assigned nursing functions in Spanish could be achieved in a short time frame. The students' discipline and commitment to the task were impressive, and it can be expected that they will continue to practice and expand their repertoire during their clinicals. Considering their limited time for electives, the University of Houston's College of Nursing prioritizing that their students learn Spanish highlights the importance that they have given to providing linguistic and culturally appropriate care to better serve the needs of the Hispanic population. While the time limitations did not allow for further structured language learning, it is a step in the right direction and an initiative that deserves to be emulated by other professional schools.<sup>5</sup> As healthcare becomes more complex, from navigating the infrastructure to the increase and prevalence of chronic illnesses that require life-long treatment plans and self-management, the effectiveness of health professionals will be determined in large part by their ability to communicate and educate the patient population in health promotion and prevention, tasks that demand cultural and linguistic proficiencies beyond the scope of this course. Thus, the recommendation to include foreign language requirements in the undergraduate preparation of students in pre-professional health tracks should continue if we want our health professionals to develop the intercultural and linguistic proficiency to effectively interact with the growing Hispanic population and to positively impact health disparities in this population in the future.

#### ACKNOWLEDGMENTS

A special thanks to Dean Kathryn Tart for her vision and support, and to the Nursing Faculty and the wonderful students at the University of Houston's College of Nursing. Additional thanks to all International Symposium on Languages for Specific Purposes (ISLSP) colleagues for their dedication to expanding our educational practices to meet the needs of society.

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<sup>5</sup> Please see the summary for the years 2018 and 2019 above.

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## APPENDICES

## APPENDIX A: Description of modules

Module	Description
I	Hispanics and Health Care in the U.S. Greeting, introductions, expressions of politeness. Days of the week, months of the year. Ser/estar in the present.
II	Collecting demographic data: Family, occupations, nationality, marriage status, numbers, address and telephone numbers. Questions.
III	Introduction to the patient interview. Body parts, internal organs.
IV	Medical History and Past History. Chief complaint. Disease, signs and symptoms nomenclature. Review of systems. Tener. Present and present perfect.
V	Putting it all together. Mock patient interview. Exam and critique. Written exam.
VI	The Physical exam. Vital signs. Instructions, simple commands and requests using the imperative. Vocabulary for clothing and furniture.
VII	The physical exam. Action verbs to give patient instruction for a head-to-toe physical exam. Taking a diet history and providing dietary recommendations. Food vocabulary.
VIII	Putting it all together. Mock physical exam, vital signs and diet history. Exam and critique. Written exam.

## APPENDIX B: Pre- and Post-Language Assessment Survey. Participants' profile.

Background questionnaire

Initials:

Gender:

Previous Bachelor's degree:

Languages other than English:

Did you study Spanish in High School? How many years? What was your highest level?

Did you study Spanish in college? How many years? What was your highest level?

Do you use Spanish at home, with friends or at work? Please be specific.

My level of Spanish proficiency is:

- a) Not able to understand, speak, read or write in Spanish.
- b) Understand basic phrases in set situations, can communicate memorized basic phrases.
- c) Can utilize basic vocabulary and verbs in relation to activities of daily living, can understand basic vocabulary and verbs in relation to activities of daily living. Can answer basic information questions (what, who, when, where, why).
- d) Can utilize different verb tenses to express specific communicative intentions, vocabulary extends to medical situations. Able to use polite forms of the language.
- e) Can utilize hypothetical discourse to offer advice and communicate possible outcomes in the medical context.
- f) Can use different communicative strategies fluently. Able to express empathy and understanding. Able to adapt to the cultural and linguistic characteristics of diverse Hispanic populations.

Choose the best answer from the following options:

1. It is the afternoon, you greet a patient by saying:
  - a) Buenos días.
  - b) Buenas tardes.
  - c) Buenas noches.
  - d) Don't know.
2. You want to ask a patient how he/she is doing, you say:
  - a) ¿Qué está?
  - b) ¿Por qué está?
  - c) ¿Cómo está?
  - d) Don't know.
3. You are introducing yourself to a patient, you say:
  - a) Me llamo X.
  - b) Soy la enfermera X.
  - c) Estoy X.
  - d) Don't know.
4. A patient is telling you how old he is, he says:
  - a) Tengo 60 años.
  - b) Soy 60 años.
  - c) Estoy 60 años.
  - d) Don't know.
5. The patient's blood pressure is 125/83, you tell him/her:
  - a) La presión es cien veinticinco/ochenta y tres.
  - b) La presión es ciento veinticinco/ochenta y tres.
  - c) La presión es uno, dos, cinco/ocho, tres.

- d) Don't know.
6. You want to ask a patient if she has had dizziness, you say:
- ¿He tenido cabeza loca?
  - ¿Ha tenido mareos?
  - ¿Ha tenido vértigo?
  - Don't know.
7. The patient tells you, "tengo azúcar," means:
- He is sweet.
  - He is diabetic.
  - He is hypertensive.
  - Don't know.
8. The patient tells you, "tengo tos," means:
- I am sneezing.
  - I am coughing.
  - I am sleepy.
  - Don't know.
9. The patient tells you, "tengo falta de aire," means:
- She is having problems breathing.
  - She is hot.
  - She is thirsty.
  - Don't know.
10. To say breathe normally:
- Hable normal.
  - Es normal.
  - Respire normal.
  - Don't know.
11. The patient is telling she has pain on her leg, she says:
- Me duele la espalda.
  - Me duele la pierna.
  - Me duele el brazo.
  - Don't know.
12. You want to tell a patient that you are going to listen to his chest with a stethoscope, you say:
- Voy a auscultar el pecho.
  - Voy a oír el pecho.
  - Voy a escuchar el pecho.
  - Don't know.
13. You want the patient to open his mouth, you say:
- Cierre la boca.
  - Abra la boca.
  - Mueva la boca.
  - Don't know.
14. The patient has ear pain, he says:
- Me duele el ojo.
  - Me duele la oreja.
  - Me duele el oído.
  - Don't know.
15. You want to tell a patient that you are going to feel his neck, you say:
- Voy a palpar su cuello.

- b) Voy a tocar su cuello.
  - c) Voy a sentir su cuello.
  - d) Don't know.
16. You want to tell a patient to take off his clothes and change into a gown, you say:
- a) No ropa, poner gown, por favor.
  - b) Quítese la ropa y póngase la bata, por favor.
  - c) Por favor, no ropa, bata.
  - d) Don't know.
17. You want to tell a patient to lay down on the examining table, you say:
- a) Siéntese en la cama, por favor.
  - b) No siente en la cama, por favor.
  - c) Acuéstese en la camilla, por favor.
  - d) Don't know.
18. You want to ask a patient what she eats for breakfast, you say:
- a) ¿Qué come en el almuerzo?
  - b) ¿Qué come en la cena?
  - c) ¿Qué come en el desayuno?
  - d) Don't know.
19. You want to tell a diabetic patient not to drink soft drinks, you say:
- a) No tome refrescos.
  - b) No tome jugos.
  - c) No tome cerveza.
  - d) Don't know.
20. You want to tell a patient to eat a healthy diet, you say:
- a) Coma bien.
  - b) Coma una dieta saludable.
  - c) No coma mal.
  - d) Don't know.
21. The patient's next appointment is on Tuesday, January 8. You say to the patient:
- a) Su cita es el jueves 8 de marzo.
  - b) Su cita es el viernes 8 de agosto.
  - c) Su cita es el martes 8 de enero.
  - d) Don't know.

#### APPENDIX C: Nursing interview/Entrevista de la enfermera

This is the practice form in English/Spanish. Additionally, the students have access to all the phrases on *Quislet.com* for pronunciation and memorization practice. On the day of the exam students use an English only form, all the verbal interactions are in Spanish, and the recorded answers are in English.

#### Evaluation Criteria:

0 Unable to understand/Serious difficulties in being understood. Errors in recording. Does not request verification.

1 Understood with some level of difficulty. Repeats requests until able to understand. Requests verification sometimes. Skips <6 questions. Uses correct vocabulary. Recorded information is correct, or with minimal errors that do not affect the patient's treatment.

1.5 Can be understood. Uses correct vocabulary. Requests verification. Records information correctly. Skips <4 questions. Uses forms of politeness.



2 Can be understood clearly with excellent pronunciation. Uses correct vocabulary. Is able to present requests in different ways. Does not skip any questions, very thorough. Uses forms of politeness.

INTRODUCTION & DEMOGRAPHIC DATA / PRESENTACIONES & DATOS DEL PACIENTE	0	1	1.5	2
1. Greetings / Saludos. (Buenos días / tardes / noches).				
2. Introduces self / Soy la enfermera / Soy el enfermero X.				
3. Ask pt. he/she is feeling / ¿Cómo está? ¿Cómo se siente?				
4. Tells pt. to sit down for some questions / Siéntese por favor, necesito su información.				
5. Asks or verifies pt.'s address / ¿Cuál es su dirección?				
6. Asks or verifies pt.'s phone number / ¿Cuál es su teléfono?				
7. Asks or verifies pt.'s marital status / ¿Cuál es su estado civil? ¿Es casado/a, soltero/a, viudo/a, divorciado/a?				
8. Asks or verifies pt.'s insurance information / ¿Tiene seguro médico?or ¿Tiene aseguranza?				
9. Asks or verifies pt.'s date of birth and age / ¿Cuál es su fecha de nacimiento? ¿Cuántos años tiene?				
10. Asks or verifies pt.'s occupation and place of employment / ¿Cuál es su empleo/profesión? ¿Dónde trabaja?				
PRESENT COMPLAINT / ENFERMEDAD ACTUAL				
11. Describe what is wrong / ¿Qué molestias tiene?				
12. Describe when the problem started / ¿Desde cuándo?				
13. Describe location / ¿Dónde le molesta? ¿Dónde le duele?				
14. Describe duration of symptoms / ¿Desde cuándo?				
15. Describe pain intensity showing a non-verbal scale / ¿Cómo es su dolor? Points to the figures on the illustrated form. ¿Mucho? ¿Poco?				
16. Describe associated symptoms / ¿Tiene otros síntomas? ¿Tiene otras molestias?				
17. What has been done to treat the symptoms, including the use of traditional medicine / ¿Ha tomado remedios? ¿Ha visto un/a curandero/a?				
18. How it interferes with daily life / ¿Le molesta para su rutina de diario o su trabajo?				
PAST HISTORY				
19. Past illnesses / ¿Qué enfermedades ha tenido? Dates/ ¿Fechas? Hospitalizations / ¿Ha estado en el hospital?, ¿Fechas?				
20. Past surgeries / ¿Ha tenido cirurgías? Type of surgery / ¿Cuál? Dates / ¿Fechas?				
21. Allergies and type of reaction / ¿Tiene alergias? ¿Qué reacción tiene?				
22. Immunizations / ¿Qué vacunas ha recibido? Dates / ¿Fechas? Immunization records / ¿Carnet de vacunas?				
23. Accidents and injuries / ¿Ha tenido accidentes? ¿Lesiones? ¿Fechas?				

<b>FAMILY HISTORY / HISTORIA FAMILIAR</b>				
24. Parents- Living or deceased / ¿Están vivos sus padres? How old are they? / ¿Qué edad tienen?				
25. Cause of death / ¿Cuál fue la causa de su muerte?				
26. Significant familial illnesses / ¿Qué enfermedades ha habido en su familia?				
<b>REVIEW OF SYSTEMS/HISTORIA CLÍNICA POR SISTEMAS (Tiene for present/Ha tenido for past history)</b>				
<b>ENT / OTORRINOLARINGOLÓGICO</b>				
27. <b>Ears / Oídos:</b> Problems w hearing / ¿Tiene problemas en oír/audición? Ringing in the ears / ¿Tiene zumbidos en los oídos? Dizziness / ¿Tiene mareos/vértigo?				
28. <b>Eyes / Ojos:</b> Pain / ¿Tiene dolor en los ojos? Redness / ¿Tiene irritación/enrojecimiento en los ojos? Vision impairment / ¿Tiene problemas de visión? Halos, floaters / ¿Ve lucecitas intermitentes o flotantes?				
29. <b>Nose:</b> Sneezing / ¿Tiene estornudos? Congestion / ¿Tiene congestión nasal? Mucus / ¿Tiene secreción (mocos)? Nose bleeds / ¿Tiene sangre por la nariz/hemorragia?				
<b>MOUTH AND THROAT / BOCA Y GARGANTA</b>				
30. Oral pain / Tiene dolor en la boca? Throat / ¿Tiene dolor en la garganta? Lesions / ¿Lesiones? Hoarseness / ¿Tiene ronquera? Snoring / ¿Ronca?				
<b>THORAX AND LUNGS / PECHO Y PULMONES</b>				
31. Chest pain / ¿Tiene dolor en el pecho? Shortness of breath / ¿Tiene falta de aire? Wheezing / ¿Tiene sibilancias/ruidos al respirar? (Show picture if in doubt). Coughing / ¿Tiene tos? Sputum / ¿Tiene flemas? / ¿Expectora?				
<b>BREAST AND LYMPHATICS / MAMAS = SENO Y GANGLIOS</b>				
32. Breast pain or tenderness / ¿Tiene dolor o sensibilidad en las mamas/los senos? Lumps / ¿Tiene bultos/pelotitas? Nipple discharge / ¿Tiene secreción de los pezones? Swollen lymph nodes / Tiene ganglios inflamados?				
<b>CARDIOVASCULAR</b>				
33. Chest pain or pressure / ¿Tiene dolor o presión en el pecho? Palpitation s/ ¿Tiene palpitaciones? Peripheral edema / ¿Tiene inflamación/hinchazón de las piernas (legs), tobillos (ankles) o las manos (hands)? Blood pressure / ¿Tiene problemas de la presión? Peripheral circulation-varicose veins/ ¿Tiene várices o problemas de circulación?				

Leg / foot color / ¿Tiene mal color en las piernas o los pies? Lesions / ¿Tiene lesiones/úlceras?				
<b>ABDOMEN / ABDOMEN</b>				
34. Pain / ¿Tiene dolor en la panza/el abdomen? Indigestion / ¿Tiene mala digestión? Heartburn / ¿Acidez? Nausea / ¿Náusea? Vomiting / ¿Vómitos? Gas / ¿Pasa gases? Jaundice / ¿Tiene ictericia?=¿Color amarillo en la piel o los ojos? Hernias / ¿Hernias?				
<b>MALE GENITALIA / APARATO REPRODUCTOR MASCULINO</b>				
35. Pain or difficulties in urination / ¿Tiene dolor o problemas en orinar? Blood in the urine / ¿Tiene sangre en la orina? Lesions / ¿Tiene lesiones en sus partes privadas? Discharge / ¿Tiene secreción del pene? Scrotal swelling / ¿Tiene inflamación/hinchazón de los testículos? STDS / ¿Tiene enfermedades de transmisión sexual=venéreas? Hernias / ¿Tiene hernias?				
<b>FEMALE GENITALIA / APARATO REPRODUCTOR FEMENINO</b>				
36. Pain or difficulties in urination /¿ Tiene dolor o problemas en orinar? Blood in the urine / ¿Tiene sangre en la orina? Lesions / ¿Tiene lesiones en sus partes privadas? Discharge / ¿Tiene secreciones? Itching / ¿Tiene picazón? Onset of menarche/ ¿Cuándo comenzó la regla/la menstruación? Menopause / ¿Cuándo comenzó la menopausia? / ¿Cuándo dejó de sangrar? Birth control methods / ¿Usa anticonceptivos/ control de natalidad? Pregnancies, abortions / ¿Cuántos embarazos/abortos ha tenido? STDS / ¿Tiene enfermedades de transmisión sexual/venéreas?				
<b>ANUS, RECTUM AND PROSTATE / ANO, RECTO Y PRÓSTATA</b>				
37. Pain / ¿Tiene dolor en ir al baño? Bowel habits / Tiene problemas en ir al baño/evacuar? Constipation / ¿Tiene estreñimiento? Diarrhea / ¿Diarrea? Blood in the stool / ¿Tiene sangre en el excremento? Hemorrhoids / ¿Tiene hemorroides/almorranas?				
<b>MUSCULOSKELETAL / SISTEMA OSTEOMIOARTICULAR</b>				

38. Pain / ¿Tiene dolor en los huesos (bones) o articulaciones / coyunturas (joints)? Swelling / ¿Inflamación? Stiffness / ¿Rigidez? Ability to walk / ¿Tiene problemas para caminar? Run / ¿Correr? Walk upstairs / ¿Subir escaleras?				
<b>NEUROLOGIC / SISTEMA NEUROLÓGICO</b>				
39. Headaches / Migraine / ¿Tiene dolores de cabeza/migraña? Coordination / ¿Tiene problemas de coordinación? Memory / ¿De memoria? Speech / ¿Del habla? Loss of strength or sensation / ¿Pérdida de fuerza o sensación? Mood or behavior changes / ¿Tiene cambios de ánimo o personalidad?				
<b>LIFE STYLE / HÁBITOS DE VIDA</b>				
40. Smoking or other tobacco use / ¿Fuma o mastica tabaco? Which/how long? / ¿Cuál? / ¿Desde cuándo?				
41. Alcohol intake / ¿Toma bebidas alcohólicas/cerveza (beer)? What? / ¿Qué bebe? How much? / ¿Cuántos tragos? How often? / ¿Con qué frecuencia?				
42. Drug use / ¿Usa/consume drogas? Which ones? / ¿Cuáles? How much? / ¿Cuánto? How often? / ¿Con qué frecuencia? How long? / ¿Desde cuándo?				
43. Medications / ¿Toma medicinas-con receta (prescribed), sin receta (over the counter), remedios (traditional medicine)?				
44. Exercise patterns / ¿Hace ejercicios o practica deportes?				
45. Sleep habits / ¿Cómo duerme? ¿Duerme bien/mal?				
46. Nutrition / ¿Cómo es su dieta?) Recent weight changes. Weight gain / ¿Ha aumentado de peso? Weight loss / ¿Ha bajado de peso?				
47. Activities of daily living. Do you need help with household chores? / ¿Necesita ayuda con las tareas de la casa?				
48. Work status. Do you work? / ¿Trabaja? Are you retired / ¿Está retirado/a o jubilado/a?) Do you do volunteer work? / ¿Hace voluntariado?				
49. Transportation. Do you drive? / ¿Maneja?). Do you have a car? / ¿Tiene coche/carro? Do you use public transportation? / Usa el transporte público? Do you depend on others for transportation? / ¿Depende de otras personas para el transporte?				
50. Family members at home. Who lives at home? / ¿Quiénes viven en su casa? Describe a typical day / Describa las actividades de un día típico / Describa su rutina diaria.				

## APPENDIX D: Physical Evaluation English/Spanish

Evaluation criteria: Pronunciation, accuracy (appropriate questions), completeness (includes all of the main evaluation areas).

0 (<70%) Unable to understand, questions are not pertinent to the area assessed, incomplete assessment for the area under exam. \*Does not follow-up on patient's cues.

1 (71-80%) Pronunciation can be understood, with some errors. Does not verify or clarify understanding on a consistent manner. The assessment is incomplete for most of the areas under exam. \*Does not follow-up on patient's cues.

1.5 (81-89%) Pronunciation is clear, very few errors. Verifies understanding and/or clarifies on a consistent manner. The assessment is complete for most of the areas under exam. \*Follows-up on patient's cues.

2 (90-100%) Pronunciation is clearly understood, at the native or near native level. Performs thorough and complete assessment, asking the appropriate questions to give directions or explain the type of assessment. \*Follows-up on patient's cues.

INTRODUCTION / INTRODUCCIÓN	0	1	1.5	2
1. Take-off your clothes and change into a gown / Quítese la ropa y póngase la bata por favor.				
2. I will be back in a moment (EXIT the room) / Regreso en un momento.				
3. Are you ready? (Knock on the door and come in) / ¿Está listo/a?				
4. Come in and wash your hands.				
5. I am going to do a head to toe physical exam and I will begin with the head/ Voy a hacer un examen físico de pies a cabeza y voy a comenzar con la cabeza.				
<b>HEAD AND NECK (Examen de la cabeza y el cuello)</b>				
6. I am going to palpate your head / Voy a palpar su cabeza.				
7. I am going to palpate your face (maxillary and frontal sinuses). Voy a palpar la cara (la frente, los pómulos/mejillas). Tell me if it hurts / Diga si duele.				
8. (Cranial VII). Raise your eye brows / Levante las cejas.				
9. (Cranial VII ). Close your eyes tightly. Resist / Cierre los ojos con fuerza. Resista.				
10. Cranial VII. A big smile / Sonrisa grande-así.				
11. Cranial VII. Puff your cheeks / Sople los cachetes or Haga así (demonstrate)				
12. TMJ (Problemas de la mandíbula o quijada). Muerda fuerte, repita. ¿Tiene problemas en masticar?				
13. I am going to check inside your nose/Voy a examinar su nariz. Raise your head a little / Levante la cabeza un poco.				
14. I am going to examine your eyes / Voy a examinar sus ojos.				
15. Cranial II, III, IV, VI. Look at the light. Put your hand like this (to focus on one eye at a time). / Mire la lucecita, ponga la mano así (Pupillary response).				

16. Visual fields. Follow the pen without moving your head / Siga la pluma sin mover la cabeza. Visual fields 2. Raise a finger when you see my hand / Levante un dedo cuando ve mi mano.				
17. I am going to feel your neck / Voy a palpar su cuello (Examine: lymph nodes, trachea, thyroid).				
18. Swallow and pass your saliva / Trague y pase saliva.				
19. Cranial IX. Raise your shoulders and resist / Levante los hombros y resista.				
20. ROM. Move your head down, side to side, up and back. Mueva la cabeza abajo (down), a la derecha (rt.), a la izquierda (lt.), arriba y atrás (up and back).				
21. I am going to examine your ears and inner ear / Voy a examinar sus orejas y oídos. (Use the otoscope).				
22. I am going to examine your mouth and throat / Voy a examinar su boca y garganta.				
23. Open your mouth and stick out your tongue / Abra la boca y saque la lengua.				
24. Cranial IX, X, XII. Say ah / Diga ah. (Inspect and provoke the gag reflex by placing the tongue depressor on the tongue).				
25. I am sorry. Lo siento (Apologize for the discomfort they may have felt).				
<b>CHEST AND LUNGS / PECHO Y PULMONES</b>				
26. I am going to examine your chest and lungs / Voy a examinar su pecho y pulmones.				
27. I am going to listen to your chest / Voy a escuchar sus pulmones. Breathe through your mouth / Respire por la boca por favor. Listen in the back only.				
28. I am going to check your respiration (expansion) / Voy a chequear su respiración. Breathe deep and slow / Respire profundo y despacio. Fremitus. Diga treinta y tres, otra vez (Say 33, again, again).				
29. I am going to examine your heart / Voy a examinar su corazón.				
30. I am going to listen to your heart / Voy a escuchar su corazón. Respire normal, respire por la nariz. (Pt. sitting up, listen to all 5 areas).				
31. Lie down, please (supine). Acuéstese boca arriba por favor.				
32. Lie on your side (rt. & lt) / Acuéstese del lado derecho (rt.), acuéstese del lado izquierdo (lt.).				
33. I am going to feel your apical pulse, feel along aorta, carotids / Voy a palpar el pulso en su pecho y cuello.				
<b>ABDOMEN (Explore all four quadrants, listening and palpating)</b>				
34. I am going to examine your abdomen / Voy a examinar su abdomen.				
35. I am going to feel your abdomen / Voy a palpar su abdomen.				
36. Say if it hurts / Diga si duele. I am sorry / Lo siento.				

37. I am going to listen to your abdomen / Voy a auscultar / escuchar su abdomen.				
<b>PERIPHERAL VASCULAR / CIRCULACIÓN PERIFÉRICA</b>				
38. I am going to check your circulation / Voy a chequear su circulación.				
39. I am going to examine your nails (hands and feet) / Voy a examinar las uñas de las manos y de los pies. I am sorry I have to squeeze your fingers / Disculpe tengo que apretar sus dedos (squeeze your fingers = capillary refill).				
40. I am going to feel your pulses (arms and legs) / Voy a examinar el pulso en los brazos y las piernas (radial, brachial, popliteal, pedis dorsalis).				
<b>NEURO</b>				
41. What is the date? / ¿Cuál es la fecha? What day is it? / ¿Qué día es hoy? What time is it? / ¿Qué hora es? Where are you? / ¿Dónde está? Why are you here? / ¿Por qué está aquí?				
42. I am going to examine your reflexes/ Voy a examinar sus reflejos (Check upper, lower extremities, Babinski).				
43. I am going to examine your sensory system / Voy a examinar sus sentidos.				
44. Say whether sharp or dull with your eyes closed / Diga filoso o no filoso con los ojos cerrados.				
45. Touch my finger and touch your nose / Toque mi dedo y toque su nariz.				
<b>MUSCULOSKELETAL / OSTEOMUSCULAR</b>				
46. I am going to examine your bones and joints / Voy a examinar sus huesos y articulaciones (Feel = palpate all joints).				
47. Extend and flex all joints (head to toe) / Extienda y doble.....OR Haga así (show them what to do).				
48. Stand-up and walk / Párese y camine (Observe posture, gait).				
49. Stand-up and close your eyes (Balance-NEURO) / Párese y cierre los ojos.				
50. Bend over and touch your toes / Toque la punta de los pies (Observe and feel spine and sacroiliac joint).				

COMMENTS:

APPENDIX E: Opinion exit questionnaire. Comments and suggestions

1. Did the course meet your expectations?
  - a) Not at all.
  - b) Somewhat.
  - c) Completely.
  - d) Above my expectations.
2. In your opinion, what was the most valuable contribution of the course?
  - a) Medical vocabulary.

- b) Cultural competence discussions.
  - c) Role playing scenarios.
  - d) Written exercises. Homework.
3. In your opinion, what was the least valuable contribution of the course?
- a) Medical vocabulary.
  - b) Cultural competence discussions.
  - c) Role playing scenarios.
  - d) Written exercises. Homework.
4. In your opinion, what two skills were most improved by this course?
- a) Receptive. Oral comprehension.
  - b) Production. Speaking ability.
  - c) Reading.
  - d) Writing.
5. On a scale from one to five, rate your communicative ability in a medical setting before taking this course:
- a) One- No communicative ability.
  - b) Two-minimal communicative ability.
  - c) Three-Fair communicative ability.
  - d) Four-Good communicative ability.
  - e) Five-Excellent communicative ability.
6. On a scale from one to five, rate your communicative ability in a medical setting after taking this course:
- a) One- No communicative ability.
  - b) Two-minimal communicative ability.
  - c) Three-Fair communicative ability.
  - d) Four-Good communicative ability.
  - e) Five-Excellent communicative ability.
7. What would you change in the curriculum? Please take a few minutes to offer your suggestions, but also to offer any other comments (negative or positive).



