

**Data Driven Program Development**  
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**Introduction**

In this essay we will argue that collecting data can lead to changes that increase enrollments, improve student satisfaction, and promote program growth. While there are a variety of meaningful ways to collect data (e.g., focus groups, short inventories, questionnaires), we focus on the use of end-of-semester surveys in Portuguese language classes at the University of New Mexico. We will discuss the data and teaching implications from just one small part of this survey. The complete survey, which was published in an earlier version with our essay in the volume edited by Norris (2009), is included at the end of this essay. Our experience with data collection confirms that it is a useful practice that provides both instructors and students with the opportunity to reflect on the program and, when appropriate, engage in making meaningful changes.

Why should Portuguese programs collect data? Here is a short list – 1) to follow up on intuitions about the way students learn Portuguese, 2) to provide feedback for instructors beyond that of the institutionalized end-of-semester evaluation, 3) to track changing demographics of the students, 4) to understand student needs, 5) to provide hard numbers to administrators to justify requests, 6) to understand the curriculum and its articulation, 7) to understand the impact of changes in the program, such as new faculty, new textbooks, new study abroad programs, or growth/decline of enrollment.

Our reasons for gathering data were to expand the Portuguese program by updating and re-designing the curriculum in order to meet student needs, especially the needs of an ever increasing presence of Spanish-speakers (Milleret 2008). We wanted to know how many

Spanish-speakers we had, their levels of proficiency, and the best ways to teach them compared to traditional methods of teaching English-only speakers. We believed that if we attracted more students with more and better designed courses, we could regain the visibility on our campus that Portuguese had in the past and play a bigger role in the activities associated with Latin America and with language learning.

We began collecting data about the Portuguese program at UNM in 2004. First we conducted an extensive program evaluation with undergraduate and graduate students to learn about the courses and their content, the teaching methodologies that were effective, and the articulation of our classes. Then we developed new courses to meet the students' needs as identified in the program evaluation. Recently we have begun looking more carefully at some of those new courses.

In this essay we will give an example of data collected in our end-of-semester survey that addressed Spanish language transfer in the classroom. As can be seen in the survey, there were ten questions about students' awareness of their Spanish transfer, about their instructors' teaching practices, and about self-correction. In this essay we focus on self-correction in writing and speaking.

### **Data and Findings**

The data presented here was collected during the school year of 2008-2009 from the five lower-division Portuguese classes, namely Port. 101 and Port. 102 (3 credit elementary courses); Port. 275, Port. 276, and Port. 275-SPAN (6 credit intensive courses). Two of the courses, Port. 102 and 275-SPAN, were designed to serve the needs of Spanish-speakers.

For this portion of the survey, three questions were asked: (1) "My classmates correct me when I speak Spanish," (2) "When I notice I am speaking Spanish, I correct myself," and (3)

“When I notice I am writing in Spanish, I correct myself.” The results for question 1 are presented in Table 1, and the results for questions 2 and 3 were combined for they showed very similar ratings and are presented in Table 2.

Table 1 below shows the ratings of learners when asked whether their classmates corrected them when they spoke in Spanish. The data shows us that in Port. 275-SPAN, a course designed for Spanish-speakers, 83% (24/29) of students agreed or strongly agreed that their classmates correct them when they speak Spanish. In contrast, all the other classes show that students do not engage as actively in helping their peers monitor their Spanish transfer.

Table 1. “My classmates correct me when I speak Spanish”

	N/A	Strongly disagree	Disagree	Agree	Strongly agree	Total	M	SD
<b>101</b>	9 24%	4 11%	12 32	6 16%	6 16%	37	1.89	1.390
<b>102</b>	1 5%	2 10%	11 55%	5 25%	1 5%	20	2.15	.875
<b>275-SPAN</b>	2 7%	0 0	3 10%	11 38%	13 45%	29	3.14	1.093
<b>275</b>	5 21%	3 13%	5 21%	9 37.5%	2 8%	24	2.00	1.319
<b>276</b>	2 5%	0 0	10 27%	17 46%	8 21%	37	2.78	.976
<b>Total</b>	19 13%	9 6%	41 28%	48 33%	30 20%	147	2.41	1.249
$\chi^2 = .000$								
R = .220								

The results observed in Table 1 offer insights into the dynamics of the classroom at UNM. On the one hand, it is clear that students are much attuned to their peers’ use of Spanish in the Portuguese classroom. On the other hand, there does not seem to be a negative attitude associated with classmate correction. Indeed, at least ½ of students (78/147 or 53%) appear to appreciate their classmates engaging in each other’s learning.

Now turning to the results of the self-correction portion of the survey, the summary of students' responses can be seen in Table 2. The results presented here were combined since they showed very similar ratings for both questions.

Table 2. (1) "When I notice I am speaking Spanish, I correct myself."  
(2) "When I notice I am writing in Spanish, I correct myself."

	N/A	Strongly disagree	Disagree	Agree	Strongly agree	Total	M	SD	$\chi^2$
<b>Beginner</b>	4 15.4%	0 .0%	1 3.8%	16 61.5%	5 19.2%	26 100.0%	2.69	1.25	.488
<b>Intermediate</b>	2 4.3%	0 .0%	3 6.5%	29 63.0%	12 26.1%	46 100.0%	3.06	.85	.009
<b>Advanced</b>	0 .0%	0 .0%	0 .0%	31 67.4%	15 32.6%	46 100.0%	3.32	.47	.258
<b>Near-native</b>	0 .0%	0 .0%	0 .0%	18 56.2%	14 43.8%	32 100.0%	3.43	.50	.263
<b>Native</b>	1 1.0%	4 4.1%	2 2.0%	53 54.1%	38 38.8%	98 100.0%	3.25	.77	.002
<b>Total</b>	7 2.8%	4 1.6%	6 2.4%	147 59.3%	84 33.9%	248 100.0%	3.19	.80	.000

It can be seen, as a general rule, that learners are indeed aware of the influence of their Spanish in their speaking and writing, and most importantly, they notice this influence. Except for those speakers who described themselves as having novice skills in Spanish, there is very little variation across the different proficiency levels in the students' perception of their efforts at self-correction.

### **Implications for teaching and program development**

After careful analysis of the results in Table 1, we asked our instructors if they were preparing any activities that required students to correct one another. According to most of our instructors, peer-correction of Spanish emerged naturally in the classroom setting, and they said that 'it was never an issue for the students being corrected.' It was not surprising to learn, however, that the instructor for Port. 275-SPAN, had implemented a mechanism for assigning

the responsibility of monitoring Spanish to the students themselves. Our data demonstrated that the students in that class were actively helping each other notice their transfer from Spanish. Based on the survey results and the example from the instructor, we decided to encourage all the instructors to implement ways to induce peer correction, either orally or written.

Based on the results in Table 2, faculty and teaching assistants have worked to develop common rubrics that include a category for awareness of Spanish transfer and students' efforts to avoid it. The rubrics are used for oral presentations and compositions. Lastly, the program attaches a reminder to the end of all tests that directs students to review the test one more time for transfer from Spanish or English, for consistency in the use of Portuguese orthography, and for repetition of errors. Samples of these rubrics are included at the end of the essay. We agree that at this point that we should maintain these resources in our program and should test their efficacy in helping our learners' awareness of the interactions between the two languages.

## **Conclusions**

Since 2004 we have practiced and learned to write questions that give us meaningful answers and we have employed a range of techniques to collect information. We began with a simple ½ sheet that contained questions about students' language backgrounds. The teaching assistants handed out the sheets and did the simple math of adding up the results. Later when we conducted the program evaluation we explored more sophisticated methods for gathering information and we developed a wider range of questions. Since the audience of students included both those who were enrolled as well as former students, we chose to utilize an on-line program called [Survey Monkey](#) that both collected and analyzed the data for us. When we wanted to look more carefully at the new courses we developed, we simplified the format to a one-page paper survey and entered the data in an Excel spreadsheet for analysis. Recently we

have placed our beginning and end-of-semester surveys on a program that is site licensed by UNM. Like Survey Monkey, this program both collects and organizes the data. We have benefitted from help provided by the university IT center, from an outside evaluator, and from a Department of Education evaluation project at the University of Hawaii. Each semester we share the results of our surveys with the teaching assistants to help them modify classroom methodologies and better prepare syllabi and course activities. We also use our data to convince administrators to fund more classes and instructors. Each year we learn more about our teaching and our students' learning. So far we have focused primarily on the undergraduate curriculum, but we intend to employ these same techniques in the graduate program too. Using data to keep our fingers on the pulse of the Portuguese program has helped us respond to student and instructor needs. The program has grown in both enrollment and in number of classes, resulting in greater visibility and credibility.

### **Works Cited**

- Milleret, Margo. "Portuguese Program Evaluation and Spanish Speaker's Needs." *Portuguese for Spanish Speakers: Teaching and Acquisition*. Campinas, Brazil: Pontes Editores (2008): 257-268.
- Milleret, Margo, & Silveira, Agripino S. "The Role of Evaluation in the Growth of the UNM Portuguese Program." *Toward useful program evaluation in college foreign language education*. Honolulu: National Foreign Language Resource Center (2009): 57-82.

## End of Semester Survey for Portuguese Spring 09

1. Indicate which course you are taking:  Portuguese 101  Portuguese 102  Portuguese 275- **Spanish speakers**  
 Portuguese 275  Portuguese 276
2. Have you taken Portuguese classes at UNM or elsewhere?  Yes  No Which one(s)?  
 \_\_\_\_\_
3. Your student status:  Freshman  Sophomore  Junior  Senior  Graduate student
4. If you are a Spanish speaker, estimate your Spanish proficiency level.  Beginner  Intermediate  Advanced  Near-native  Native
5. Where did you find out about this course? (Mark all that apply)  On-line course schedule  
 Freshman orientation flier  A friend taking Portuguese  Flier in Language Lab  
 My advisor – please underline Arts & Sciences, University College, Span & Port, Lat Am Studies  
 Other (please specify) \_\_\_\_\_

6. Spanish in the Portuguese classroom	Strongly agree	Agree	Disagree	Strongly disagree	N/A
My background in Spanish was helpful to me in learning Portuguese.					
My instructor makes comparisons between Portuguese and Spanish that help me learn better.					
My instructor corrects my pronunciation when I speak Spanish during class.					
My instructor corrects me when I write in Spanish					
My classmates correct me when I speak Spanish.					
My classmates correct me when I write Spanish.					
I would appreciate having written reminders on tests/compositions to remind me to check over my work.					
Outside class I refer to materials that compare Spanish and Portuguese in the workbook or on E-Reserve.					
When I notice I am speaking Spanish, I correct myself.					
When I notice I am writing in Spanish, I correct myself.					

7. Your experience in the course.	Strongly agree	Agree	Disagree	Strongly disagree
I was motivated to study Portuguese.				

The course was the right level for me..				
The course met my expectations.				

8. On the back, please comment further on the ratings above or on any other aspect of the class.

## Samples of Reminders and Rubrics

Example of reminder questions for tests and quizzes

1. Sim Não Todas as palavras neste exame estão escritas em português ( e não em inglês ou espanhol).
2. Sim Não Todas as palavras têm a ortografia para português (e não para inglês ou espanhol).
3. Sim Não Não existe nenhuma repetição de erros em português, inglês, ou espanhol.

Rubric for oral class presentations

1= needs improvement 2= satisfactory 3= good 4= excellent

Criteria	Scale			
Evidence of rehearsal.	1	2	3	4
Speaking is smooth and even, few pauses or silence.	1	2	3	4
Pronunciation that is understood, without language transfer.	1	2	3	4
Material is organized and appropriate to the assignment.	1	2	3	4
Kept to the time limit	1	2	3	4

Rubric for Writing Assignments (homework, or composition questions)

Points	Description
9- 10	The student answered the question completely, and gave excellent examples to support the main idea(s). There are 1-2 errors in form (grammar, spelling). There is little transfer (1-2 examples) from Spanish or English. There are no parts that are off topic. The student used extensive vocabulary from the textbook.
7-8	The student answered the question well, and gave good supporting examples. There are 3-5 errors in form (grammar, spelling). There is some transfer (3-5 examples) from Spanish or English. There are few parts that are off topic. The student used substantial vocabulary from the textbook.
5-6	The student has not completely answered the question. One problem could be that the ideas are not completely developed, or that there are no supporting examples. There are too many errors in form (over 6) and/or too much transfer from Spanish or English (more than 6 examples). There are parts of the answer that are off topic. The student used some vocabulary from the textbook.
4	The student made an attempt to answer, but the ideas and/or supporting examples do not fully communicate meaningful and complete information. There may be too many errors in form or too much transfer from Spanish or English. Most of the answer is off topic. The student did not use vocabulary from the textbook. The student should speak to the instructor.

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The student did not turn the work in on the date required.