



# Attitudes toward Spanish and Other Foreign Languages among Undergraduates in an Engineering University

Dr. Jorge Porcel <sup>1</sup>

<sup>1</sup> Arts, Languages & Philosophy, University of Missouri, USA

## Abstract

*The lack of foreign language (FL) skills in the U.S. is not a new topic. News headings such as Learning a foreign language a 'must' in Europe, not so in American (Devlin, 2015) is not at all news. As Richard Lambert (1987: 10) has aptly put it "[m]ost of us are devoutly monolingual," and to such extent that "[a] popular stereotype of Americans traveling abroad is the tourist who is at loss when it comes to coping with any language other than English" (Devlin, 2015).*

*However, there is a danger in this monolingual trend as Lambert (1987: 10) warns in the same article: "There is nothing more damaging to the American capacity to cope in a global society than the abysmally low level of foreign language competency of most Americans" (Lambert 1987: 10). It is not that funds are lacking, he claims, since at the time he was writing, the annual spending in the teaching of FLs was more than \$2 billion. Nor it is lack of time investment on part of the students, since millions of them take French, German, and Spanish courses for at least two years, sometimes four, or even six in high school or college (Lambert 1987: 10)*

**Keywords:** Foreign language, Monolingual trend, Preliminary assessment, Education

---

## INTRODUCTION

The lack of foreign language (FL) skills in the U.S. is not a new topic. News headings such as *Learning a foreign language a 'must' in Europe, not so in American* (Devlin, 2015) is not at all news. As Richard Lambert (1987: 10) has aptly put it "[m]ost of us are devoutly monolingual," and to such extent that "[a] popular stereotype of Americans traveling abroad is the tourist who is at loss when it comes to coping with any language other than English" (Devlin, 2015).

However, there is a danger in this monolingual trend as Lambert (1987: 10) warns in the same article: "There is nothing more damaging to the American capacity to cope in a global society than the abysmally low level of foreign language competency of most Americans" (Lambert 1987: 10). It is not that funds are lacking, he claims, since at the time he was writing, the annual spending in the teaching of FLs was more than \$2 billion. Nor it is lack of time investment on part of the students, since millions of them take French, German, and Spanish courses for at least two years, sometimes four, or even six in high school or college (Lambert 1987: 10).

Twenty years later, a different author depicts a similar situation:

We currently have over 14 million U.S. public school students in foreign language classes, and about 1½ million students in college foreign language classes. Surely we must be producing a huge number of bilingual graduates, right? [...] The figure is 10% (Jiraffales2007: 7)

But that is not the only nor the worse problem: after billions of government funds and years of study invested by students, the level of proficiency of that 10% is less than desirable (Jiraffales, 2007: 7). Furthermore, one of the most puzzling findings in Porcel's (2006: 102) was the negative impact that courses of Spanish L2 had on Miami Cuban heritage speakers. Pearson statistical test showed a negative correlation ( $r = -.525$ ) between *years of instruction of Spanish L2* and *competence in Spanish*. In other words: the higher the number of years of Spanish instruction as L2, the lower the Spanish competence.

The present study is interested in making a preliminary assessment on the issue of FL language deficit among college students from the point of view of their language attitudes and motivations. This study has been part of the UISFL grant awarded to Missouri University of Science and Technology by the U.S. Department of Education. The immediate purpose of the grant is to develop a Minor on Latin American Studies for Technical

applications. In addition, we want to increase the number of FL students in our programs by fostering the development of courses that appeal to our STEM students, strengthen their competency in global citizenship, and improve the humanistic component of their education.

The specific purpose of this study is to gather and analyze new data about college students' attitudes towards the learning of FLs in general and Spanish in particular, with the goal of assessing the magnitude and direction of the current FL deficit using a sample of our undergraduate population. Four major clusters of variables will be considered:

- attitudes towards the learning of FLs and Spanish in particular
- instrumental orientation towards the learning of FLs and Spanish in particular
- integrative orientation towards the learning of FLs and Spanish in particular
- attitudes towards the development of global competency and citizenship.

This research report is divided in two main sections: the theoretical framework presents and contextualizes the U.S. FL deficit in terms of its extent, development in time, and attitudinal substratum. A contrast with the situation in the European Union provides a reference for comparison. The second part is the study which contains a brief section on language attitudes and motivation in second language acquisition (SLA), a section on methodology, the analysis and discussion, and final section summarizing and emphasizing the main findings.

### THE U.S. FL DEFICIT: COMPETENCY, ATTITUDES, AND SCHOOLING

In this section, three different nationwide surveys will be commented to provide a characterization of FL language proficiency, attitudes, and schooling in the U.S. The surveys are separated by at least 12 years, what gives us a historical dimension of the deficit in 30 years.

The first survey used data gathered in 1979 by the University of Michigan Research Center. The study was conducted by phone and attained a nationally representative sample of 962 respondents. The goal was to elicit "attitudes and experience of Americans with regard to the study of foreign languages" (Eddy 1980: 58).

To assess FL knowledge, the survey asked *Are you familiar with any (other) languages (than English)?* Forty-one percent of respondents answered *yes*, and 57.1% answered *no*. However, "[f]amiliarity with a language does not mean that a person can actually use the language" (Eddy 1985: 58). In fact, when asked *Are you able to read, write or speak the foreign language?*, of the 41% reported above, only 59.4% answered *yes* to the last question. In terms of the total sample, that implies that only 24.2% could manage to use the language (Eddy 1980: 61).

As Lambert (1987) and Jiraffales (2007) argued, billions are annually spent in FL education, however Eddy (1980) reports that only one third (29.6%) of his sample learned FLs at school. When asked in what grade they started, 0.1% began before elementary school; 11.3% during elementary; 39.9% in junior high school, 34.6% in senior high school; 8.3% in college; 2.4% beyond college.<sup>11</sup> When asked *How many years did you study the language?* Twenty-two percent did it for only one year, 31.6% for two years, 17.5% for three years, 12.4% for four years, and 14.7% for five years or more. Also, this group of participants were asked: *Do you feel that studying a foreign language was worthwhile?* Seventy-five percent said *yes* and 23% said *no* (Eddy 1980: 60-1).

Respondents were also asked *Would you like to study a foreign language in the future?* Forty-five percent said *yes*; 52.2% said *no*. One last question: *Learning a Foreign Language helps a person get a good job in this country?* Only 7.5% *strongly agreed*, 36.1% *agreed*, 44.1% *disagreed*, 5.8% *strongly disagree*, 3.8% don't know/can't decide. Notice that the majority (53.7%) either disagree, strongly disagree or can't decide.

Summarizing the findings reported above, less than one quarter of the sample is able to use a FL they are familiar with. About one third of participants learned the FL in school, and three quarters of them started taking FL classes in high school. Regardless the validity of *critical age* hypothesis (Lenneberg 1967; Abello-Contesse 2009), American students lag behind their European counterparts who usually start at elementary school. Another interesting datum is the how much time U.S. students invest in FL courses: 53% took only between one and two years. Friedman (2015) argues that nobody would contend that competency in STEM subjects takes years to develop up to the level that the learner can feel comfortable using and applying this knowledge. "Language proficiency is just as hard to build as it is to maintain," but hardly ever recognized (Friedman, 2015).

As for the last three attitudinal questions, the majority of those who study a FL consider it a worthwhile experience, although, less than one quarter answered *no*. In fact, the next question, *Would you like to study a FL in the future?* supports my previous claim since the majority (52.2%) has no interest and probably it is because they see no value in studying a FL, as the next question suggests. When asked if *Knowing a FL helps a person to get a good job in this country*, only 7.5% *strongly agree*, 36.1% *agree*; 44.1% *disagree*, 5.8% *strongly disagree*, and

<sup>11</sup> As can be observed, the total sum does not add up to 100% because there is a 2.5% of missing answers. In the rest of the article, I won't report the number of missing answers.

3.8% *don't know/can't decide*.

The second study was conducted 20 years later. McComb (2001) used a random national sample of 1024 adults. To elicit FL proficiency, respondents were asked *Do you personally speak a language other than English well enough to hold a conversation?* Twenty-six responded *yes*, and 74% responded *no*.

The survey identified four trends. The first: the older the participant, the lesser the odds of knowing a FL. In the age cohort 18-29, 43% was able to speak a FL, compared to 25% for those from 30-49, 22% for those from 50-64, and 15% for 65 or older.

Second, the higher the level of education, the higher the chances of FL knowledge. Among high school graduates the figure was 20%; for respondents with some college was 25%; for college graduates 33%; and for postgraduates 43%.

Third, FL capabilities seem to be unevenly distributed by region, with the highest figure (40%) in the West, significantly dropping to 25% in the East, 22% in the South, and 19% in the Midwest.

Finally, political ideology seems to be a predictor of FL knowledge. Among liberals the figure was 33%, decreasing among moderates and conservatives to 26% and 23% respectively.

Two more questions of this study are worth reporting. The first was *How important is it that immigrants living in the United States learn to Speak English?* The distribution of answers was: essential (77%); important (19%); not too important (2%); not at all important (1%). The second was *How important is that Americans learn to speak a second language other than English?* Frequency of answer was: essential (19%); important (50%); not too important (18%); not at all important (12%).

From Eddy (1980) to McComb (2001) the number of individuals who can communicate in a FL remains virtually the same: 24% and 26% respectively. However, a positive development is that younger Americans are leaning FLs: the percentage for the cohort 18-29 is considerably higher compared to the next (30-49): 43% and 25% respectively. FL competency seems to be concentrated in the West of the country (40%), with the Midwest at the lowest point (19%).

Finally, liberals are more likely than conservatives to have FL capabilities. This finding is not surprising since liberals are more open to embrace multiculturalism, whereas conservatives favor nationalism. Finally, 77% considers it *essential* that immigrants living in the U.S. learn the English language. In contrast, only 19% considers it essential that Americans learn a FL, whereas 31% believes that is *not too important, not important at all important, or do not have an opinion*.

One more reflection on the last figure. When we sum the number of participants that consider it *essential* or *important* for Americans to learn a FL, the total adds up to 69%. This important majority represents a clear contrast with the number of respondents who can actually converse in a FL. So we have this large gap between respondents who actually have the skill (26%) versus (69%) who considers the skill either essential or important. How can we explain this gap? I think the answer rests on the effect of the social desirability bias. Still, there is a considerable minority (31%) whose negative answers just point out that there is a high percentage of Americans with no interest in FLs.

The third study, conducted 12 years after the previous, was also based on a Gallup poll. Most of the questions used by McComb (2001) were recycled, although more demographic detail was added to the data. Besides, the national representative sample was about 5 times larger (N=5,159) and categorized by race/ethnicity: non-Hispanic whites 2,149; non-Hispanic black 1,010; Hispanics 1,000. Interviews were also conducted by phone but Hispanics could choose their language of preference, i.e., English or Spanish (Jones, 2013).

FL proficiency was elicited through a question similar to the one used in 2001, *Do you personally speak a language other than [English/Spanish] well enough to hold a conversation?* The figure for all Americans was: 34% *yes* and 66% *no*. Divided by race/ethnicity, 70% of non-Hispanic Whites answered *no*, as well as 68% of non-Hispanic Blacks. The figure for Hispanics (45%) was appreciably smaller.

First, the age trend identified in 2001 emerged stronger in all categories: Between ages 18-29, 52% was able to speak a FL; compared 36% for those from 30-49, 27% for those from 50-64, and 21% for 65 or older. Second, same as before, higher levels of education increased the odds of FL knowledge. Among high school graduates the figure was 26% (it was previously 20%); for respondents with some college it was 34% (previously 25%); for college graduates it was 40% (previously 33%); and for postgraduates it was 46% (previously 43%). Third, whereas the West remained at 40% level of FL competency, regional distribution of FL capabilities grew: The East experienced a significant leap, rising to 38%, almost to the level of the West. The numbers for the South and the Midwest also underwent increases of 34% and 25% respectively.

Responses to question *How important is it that immigrants living in the United States learn to Speak English?* are tabulated below (see table 1).

	Essential (%)	Important (%)	Not important (%)
Whites	77	20	3
Blacks	67	26	5
Hispanics	58	38	2
Democrats	65	30	1
Independents	71	25	1
Republicans	85	14	3
Liberals	59	37	4
Moderates	74	23	2
Conservatives	80	16	3

**Table 1: Frequency of answers to *How important is it that immigrants living in the United States learn to Speak English?* by race/ethnicity, political party affiliation, and political ideology (Jones, 2013)**

Answers to question *How important is that Americans learn to speak a second language other than English?* appear in table 2.

	Essential (%)	Important (%)	Not important (%)
Whites	17	50	32
Blacks	27	49	23
Hispanics	30	51	18
Democrats	24	53	23
Independents	21	51	28
Republicans	13	46	40
Liberals	23	55	21
Moderates	23	53	24
Conservatives	16	45	38

**Table 2: Responses to the question *How important is that Americans learn to speak a second language other than English?* by race/ethnicity, political party affiliation, and political ideology (Jones, 2013)**

Contrasting the data from McComb (2001) and Jones (2013), we perceive new positive changes. First, the number of conversant in a FL rose from 26% to 34%. Still, 66% of respondents with no FL capacity in the richest country in the world in the 21<sup>st</sup> century is an overwhelming proportion of the U.S. populace. The data does not allow quantitative comparisons in terms of race ethnicity, but since Hispanics are almost twice as likely as Whites or Blacks to be bilinguals, it is quite possible that Hispanics have been a factor in the rise of bilingualism. Other data concurs in support of this claim: 97% of Hispanic respondents claimed to be bilingual, with only 3% being Spanish monolinguals. Of that total, 74% was interviewed in English and identified Spanish as their L2. The other 23% was interviewed in Spanish and identified English as their L2. Finally, of the total of participants who claimed to be conversant in a FL, 60% identified Spanish; 12% claimed French and the same number was claimed for German.

Table 1 indicates that the majority of respondents in all race/ethnic groups think it is *essential* that immigrants learn English. However, the intensity of responses seems to be significantly related not only to race/ethnicity but also to ideological position and political party affiliation. When we look at the figures for the category *essential* (table 1, column 2), we notice a cluster of the highest figures for whites (77%), Republicans (85%), and Conservatives (80%) and another of the lowest numbers for Hispanics (58%), Democrats (65%), and Liberals (58%). That can be an indication that the issue of language deficit and bilingualism in the American society is not –or not only– about a what it seems, a practical skill unevenly distributed among the populace, but rather one of power and ideology.

Although it can be argued that the words *immigrant* and *immigration* in the U.S. are susceptible to different positive or negative associations, I contend that currently *Hispanic immigrant* and *immigration* together with *illegal immigrant* and *illegal immigration* are at the very top and constitute lexical collocations. These collocations belong to a political discourse in which the language issue emerges through the claim *that immigrants living in the United States should learn to Speak English*. The latter phrase conveys two different readings usually undistinguished. The first reading can be seen as a benign constative proposition *it is useful/convenient for immigrants to learn English*, and it is shared by many Americans and U.S. Hispanics regardless their political position. The second is a covert accusation *immigrants are not learning English and they should* and this is a political ideological statement. The problem with this second interpretation is that the overwhelming majority of Hispanics are either bilingual or English monolinguals, as every sociolinguistic study I know has conclusively proven (see Porcel 2006, 2011). Therefore, if the vast majority of Hispanics are bilinguals, Jones (2013) wonders why Americans find this issue so

essential and proposes two answers: according to one, the statement conveys a moral imperative: Americans think that “U.S. Hispanics should assimilate to the norms and costumes of the country,” in other words, the old Melting Pot ideology. This is, as we know, an ideological talking-point in daily news for

Whites-Republican-Conservatives. According to the other, Americans are thinking in terms of protecting their own comfort zone by placing the burden of communication on the immigrants as has been done in the past. The problem with this type of thinking, among others, is that it is counter-productive because it produces and reproduces the FL deficit. It runs against multiculturalism and reinforces the ideology of monolingualism. This contention is further supported by the figures in Table 2 which shows that for Americans it is not essential to speak a FL, probably because, as Jones (2013) claims, they consider it more a desirable skill than something essential, i.e., what I previously referred to as social desirability bias.

## BILINGUALISM IN THE EUROPEAN UNION

The previous discussion will not reveal significant insights if we limit it to the U.S. We should provide a wider context to illustrate how other countries are building their FL capacities because such contrast will give us depth on the extent of our language deficit. An obvious term of comparison is the European Union (E.U.) When we compare the figures for bilingualism between the U.S. and the E.U., the difference is humbling. As Nardelli (2014) reports 54% of Europeans can converse in at least one L2, 25% in at least two, and 10% in at least three. Moreover, in a number of countries almost everyone can speak an L2: Luxembourg (98%), Latvia (95%), the Netherlands (94%), Malta (93%), Slovenia and Lithuania (92%), and Sweden (91%) (Nardelli, 2014).

Whereas the U.S. does not have a national policy to regulate FL requirements, most European students must take their first FL between the ages of 6 and 9. The only outlier is England where the age is 11. In addition, Scotland and Ireland do not have FL requirements, with the caveat that the study of Gaelic is mandatory in Ireland but not considered a FL (Devlin, 2015).

English is ranked as the most studied language in the E.U. In 2009-2010, 73% of the elementary school population, and 90% of the secondary were taking English as FL. Table 3 presents the mandatory age for the first FL requirement and the number in parenthesis next to some countries indicates the mandatory age for the second FL for those with such additional requirement.

Age 3	Age 5	Age 6	Age 7	Age 8	Age 9	Age 10	Age 11
Belgium (13)	Cyprus (12)	Austria (15)	Estonia (10)	Bulgaria (15)	Denmark	Netherlands	U.K.
	Malta (11)	Croatia	Finland (13)	Czech Rep. (15)	Hungary (14)		
		Italy (11)	France (13)	Germany	Iceland (10)		
		Liechtenstein (15)	Poland (13)	Greece (10)	Latvia (12)		
		Luxembourg (7)	Sweden	Lithuania (12)	Slovenia (12)		
		Norway (16)		Romania (10)	Turkey		
		Portugal (12)		Slovakia (11)			
		Spain					

**Table 3: Compulsory age for studying FL by country (Devlin, 2015)**

Whereas most of the FL instruction in the E.U. starts at elementary school, data from Eddy's (1980) indicates that only 11.3% started FLs at that early level. In addition to that, U.S. FL programs in elementary schools are being dismantled. Pufalh and Rhodes (2011: 261) report that:

[i]n 1997, 31% of elementary schools taught [foreign] languages, compared to 25% in 2008, a statistically significant decrease [...] public elementary schools offering foreign languages, [went] from 24% in 1997 to 15% in 2008.

On a different note, it is hard to ignore the contrast between the U.K. and the rest of the E.U., as well as the parallelism between the U.S., and the U.K. The following quote is reminiscent of the findings discussed in the previous section (Eddy, 1980; McComb, 2001; Jones, 2013). According to Paton (2013)

[r]esearch by the British Council finds that three-quarters of UK adults cannot hold a conversation in a foreign language, with fears that public apathy towards the subject risks harming the economy

It seems obvious to understand the underlying common-sense reasoning for native speakers of English: if almost the whole world is learning English, why do we need to learn FLs? This type of reasoning is exactly what Dlabay and Scott (2001 –quoted in Vieira 2008: 14) object:

Being a native speaker of English is both an advantage and a disadvantage. It is an advantage because you already know the major language of international business. It is a disadvantage because you might decide wrongly that there is little need to learn another language.

There are concrete examples that proof the validity of the claim. Marshal & Heffes, (2005 -quoted in Vieira 2008: 17) assert that although English the most common language in the economic sphere, “the ability to succeed in business in Europe, Asia/Pacific and Latin America” many times depends on knowledge of FL languages. An article from *Expansion Management* (2005 –quoted in Vieira, 2008: 17) makes a slightly different point: “[t]here is a significant competitive advantage for executives to be multilingual and in 10 years, it will be more important than ever for executives to be at least bilingual.”

A different reason appears in Peterson (2002 -quoted in Vieira, 2008: 19) who explains that with the rise of globalization and multilingualism, English is not necessarily the language privileged in corporate meetings: “at Airbus executive meetings, ‘if a majority speaks Spanish, French, or German, the meeting is held in that language.’”

Weber (2004) writes about how large corporations have been filling the gaps of the education system to develop FL competency among their personnel:

Despite the popular thinking that foreign-language training for Americans is expensive and unnecessary because English is the language of business, the technology giant [Intel Corporation] is expanding its unique language program

The program has costed more than \$762,000, training 2,495 employees in FLs. Obviously that amount of money is not offhandedly spent, so we must think that there is a need worth the investment. Other companies, such as Procter & Gamble and IBM, instead of running FL programs in their corporate premises, send their employees to schools for FL instruction (Weber 2004).

In the following section, I will offer the perspective of the FL deficit from the point of view of the U.S. Department of Education and the U.S. Department of Defense.

## **THE IMPORTANCE OF THE FL DEFICIT FOR THE U.S. DEPARTMENT OF DEFENSE AND U.S. DEPARTMENT OF EDUCATION**

In the current decade, the U.S. Department of Education (DoE) and the Department of Defense (DoD) have issued parallel reports emphasizing their concern about the FL deficit.

It is remarkable that in 2011, and for the first time, the DoE issued a detailed strategic plan for 2012-2016 to address *international priorities* in education. The goal was to foster the development of a globally competent citizenry through the education system. The rationale comes down to a single concept: globalization (U.S. Department of Education, 2011).

Due to globalization, the country desperately needs global citizens ready to face the current challenges posed by communication and trade, global issues, national security and diplomacy, and multicultural communities within the U.S. borders (U.S. Department of Education, 2011). Besides, the idea that only big corporations require personnel with FL skills is outdated. In a recent study (Damaris et al., 2017: 27) reported that

smaller organizations, specifically those between 10 and 100 employees, were more likely to require new hires to speak at least one language besides English, in contrast with large organizations (1,501–10,000 [sic] employees) and very large organizations (4,001 to 10,000 [sic] employees).

This is an indicator that globalization has penetrated deep into the most basic fabric of America’s economy, i.e., the small business. In total agreement, the DoE’s states that “transnational communication and commerce are increasingly part of the daily work of large and small businesses” and “they face difficulties in hiring employees with the requisite of global skills, including cultural awareness and linguistic proficiency” (U.S. DoE, 2011: 2).

Therefore, in this context, field (*over*)specialization, narrowly defined as it has been and still is in education, is no longer a valid metric to assess the quality of college graduates.

Graduates who can only offer highly specialized scientific knowledge will find it hard to fit in a global work market that demands global competency and global citizenship skills. In order to do so, colleges need to revise their curriculum and adjust it to the needs of the 21<sup>st</sup> century workforce, making L2 proficiency, cultural sensitivity, and appreciation for world cultures key pillars of the new curriculum (U.S. DoE, 2011).

Commerce is not the only area of concern in the DoE's report. Today, the world confronts a number of global issues which require international collaboration among diverse crews of scientists and workers. These well-known issues range from climate change to international terrorism, epidemics across borders, global economic and financial crisis, natural catastrophes, etc.

Another key area in need of global competency is national security and diplomacy. Here the DoD's report overlaps and expands the DoE's. In its *Strategic Plan for Language Skills, Regional Expertise, and Cultural Capabilities 2011-2012*, "[t]he Department's vision is to 'have the required combination of language skills, regional expertise, and cultural capabilities to meet current and projected needs'" (U.S. Department of Defense, 2011: 8 -italics in the original). The report reminds us that "[U.S.] national security and interests are inextricably linked to the greater international community" and that "[t]his global involvement will continue." In consequence, there is an urgent need of

men and women in our military and civilian corps [...] prepared for the linguistic, geographical, and cultural complexities of international environments to successfully meet the operational demands of our global commitments" (U.S. Department of Defense, 2011:4).

Furthermore, the report insists on the fact that "[t]hese capabilities cannot be taken lightly, and actions must display the sense of urgency necessary to build, enhance and sustain these required capabilities for current and future missions" (U.S. Department of Defense, 2011:5).

Finally, there is another dimension of globalization, usually overlooked, considered in both reports. Global citizenship/competency is normally discussed in the framework of transnational and international interactions. However, globalization is also the age of massive diasporas in all directions but mainly from south to north and from east to west. In 2010, 50 million immigrants were living in the U.S. By 2044, according to the U.S. Census Bureau, above 50% of all Americans are expected to be part of a minority group, and by 2060, about 20% of the U.S. total population is estimated to be foreign born (Colby and Ortman, 2015). By 2025, the college population will be the biggest and most diverse ever (Fry, 2015), and by 2030, these college graduates will begin to integrate the workforce. Currently the U.S. is surpassed only by Mexico in number of Spanish speakers. According to estimates, by 2050, the number of Hispanics in the U.S. will grow almost 10%, and some predict that this country will become first in number of Spanish speakers. Finally, as far as the world population is concerned, the number of Muslims will match the number of Christians. In synthesis, all these demographic changes make it clear that the nationalistic framework we have been shaped our understanding of national communities needs to be restructured if we want to foster peaceful and cohesive local communities as well as wider *new* imagined communities, in the sense of Anderson (2006).

On the one hand, immigrants represent linguistic and cultural resources that enrich the society as a whole. In addition, as the U.S. Anglo Whites are aging and their patterns of natality will not satisfy the needs of the labor market, and U.S. Hispanics, the youngest and fastest growing group by birth rate and immigration, will become their replacement. Therefore, U.S. will become a more diverse society where our physicians, coworkers, neighbors, professors, friends, will not look very alike, nor speak very similar, and will not share the same worldviews. In consequence, the question is: Are we going to include them in order to build a civic, cohesive society? Is there another alternative?

In summary, globalization is a fact. The phrase *we live in an interconnected world* is a worn out cliché. In this context, it is incumbent upon every one of us to revise our chauvinistic and ethnocentric ideologies, stepping out of our in-group comfort zones, becoming global citizens. For that to happen, we will need to be able to meet *the other* half way, opening ourselves up to different worldviews.

## THE STUDY

The present study grew out of a USIFL grant awarded to Missouri University of Science and Technology to develop a minor in *Latin American Studies for Technical Applications*. Our Spanish program has a traditional Spanish minor consisting of a number of language practice classes for the lower levels (novice and intermediate) and topic courses (Hispanic Civilization, Spanish Linguistics, Literature, Film, etc.) taught in Spanish for students above intermediate.

Missouri S&T is mainly an Engineering School although an important segment of students is pursuing careers in related STEM fields such as physics, mathematics, biology, chemistry, etc. One of the main motivations to request the grant was to foster a number of courses that could be more attractive to STEM students, along with increasing the number of study abroad ventures, to enhance the humanistic education of our undergraduates.

Last but not least, we wanted to increase the enrollment in our minor programs in order to develop a more populated program. In this framework, one of the initiatives undertaken by me was to conduct a survey on attitudes toward FLs, and Spanish in particular, in order to better understand and guide our endeavor.

## LANGUAGE ATTITUDES

Although attitudes are among the most important concepts in social psychology, it is hard to provide a confident definition since there is not clear agreement on how they are to be defined. Thus in general terms, *attitudes* are dispositions to react from a very positive to very negative manner to a set of objects or situations (Edwards 1995).

One important attribute of attitudes is that they are deemed to have explanatory power: i.e., they are understood as “an internal affective orientation that [...] explain the actions of a person” (Reber 1995: 67).

In linguistics, the concept of attitude has been used, at least, since the birth of sociolinguistics (Weinreich 1953). Yet, one important caveat is that the very label is misleading since they are not attitudes toward a language itself, but toward the L2 community identified with the language. In other terms, statements such as *language X is beautiful/civilized/poor/ rough/precise*, etc. do not result from objective analyses of linguistic features such as vowel harmony, syllabification rules, stress pattern, or subject-verb agreement, etc., but from subjective judgements based on the speakers of the language and their culture. These judgements affect learners’ motivation toward the acquisition of the L2.

When we think of FL learning, normally we have a very narrow scope of what is involved in the task. We tend to think that the learner acquires a number of vocabulary items plus the combinatory system that allows to arrange the lexical items into grammatical sentences. In that sense, the learning of a FL language is similar to other school subjects, like for example, learning logic. Therefore, we may or may not find the subject appealing and consequently develop attitudes towards it. For Gardner, however,

[...]languages are unlike any other subject taught in classroom in that they involve the acquisition of skills and behavior patterns which are characteristic of another community (Gardner 1985 – quoted in Williams and Burden: 115)

Therefore, our attitudes toward that FL community affect our attitudes toward the subject. Following Gardner’s insights, Williams and Burden (1997: 115) explain that in SLA “learning a second language is ultimately learning to be another social person” since it implies “an alteration in self-image, the adoption of new social and cultural behaviors and ways of being, and therefore [it] has a significant impact on the social nature of the learner.” In sum, FL learning is prejudiced by our attitudes towards speakers of that language community. This is one of the reasons why language attitudes are key to understand FL acquisition. If someone holds a positive perception of the L2 community, learning such a language will be more desirable than learning the language of a community negatively perceived.

### ATTITUDINAL VARIABLES INCLUDED IN THE QUESTIONNAIRE

In order to design the questionnaire on language attitudes for this study, I have relied upon three concepts from Gardner’s (1985) socio-educational model: motivation, orientations, and cultural beliefs. *Motivation* emerges as the counterweight between two variables: the amount of energy put towards the task and the subjective determination to master the L2. This balance is partially a function of two types of *orientations*:<sup>2</sup> *instrumental* and *integrative*.

*Instrumental orientation* refers to external and practical purposes that motivate the learner to pursue the mastering of an L2. They refer to the “potential pragmatic gains of L2 proficiency, such as getting a better job or a higher salary” (Dörnyei, 2001: 49). *Integrative motivation* is internal, and has a socio-affective component. It refers to the “positive disposition toward the L2 group and the desire to interact with, an even to become similar to valued members of that community” (Dörnyei 2001: 49).

*Cultural beliefs* of L2 students result from the sociolinguistic language contact situation. Learning Spanish as an L2 in the U.S. is different from learning, say German, whose cultural referents and community of speakers are removed from the day-to-day reality of Americans. Contrarily, Spanish and the Hispanic community are part of the daily life of Americans, from direct interactions to reports on the daily news, where they are usually portrayed in negative tones and their positive contribution is absent most of the time. From the institutional perspective, Spanish is a minority language in the U.S. and this minority is economically and educationally disadvantaged, and considered racially different from mainstream America. In sum, at the macrosocial level, cultural beliefs about U.S. Hispanic in America are not very positive.

<sup>2</sup> According to Dörnyei (2001) the Gardner’s term *orientation* is equivalent to the concept of *goal* in psychology.

## METHOD

### Instrument

The data for this study was collected using a written questionnaire consisting of 24 Likert-scale items of 5 values – i.e., strongly agree, agree, neither agree nor disagree, disagree and strongly disagree– or some variant of this wording. In addition, the questionnaire included 13 items to account for demographic variables and two related to FL enrollment before college.

A terminological caveat: A five-point Likert scale consists of two positive choices, which I call *positive answers*, one middle choice, which I will call *neutral answer*, even though the wording is not always so, and two negative choices, which I call *negative answers*. When reporting frequency of answers, I will usually combine the value of the 2 positive answers on the one hand, and the value of the neutral and negative answers on the other.

The 24 Likert-scale items were designed to elicit language attitudes. Four main thematic clusters were conceived to develop the instrument:

1. attitudes toward the learning of FLs
2. instrumental orientation
3. integrative orientation
4. attitudes toward global citizenship.

Below, the reader will find a description of the organization of the questionnaire in main themes, subthemes, and items.

### **1. Overall attitude toward the learning of FLs and Spanish in particular**

#### **1.1. Assessing interest in learning FLs and Spanish in particular**

Item 4: I am interested in learning Spanish

Item 5: I am interested in learning a FL but not Spanish

#### **1.2. Assessing appeal of learning FLs and Spanish in particular**

Item 9: Learning Spanish is/would be engaging

Item 10: I find learning FLs engaging but not Spanish

#### **1.3. Assessing cognitive demands of FL learning and Spanish in particular**

Item 11: Learning Spanish is/would be challenging difficult

Item 12: I find the learning FLs challenging but not Spanish

#### **1.4. Assessing satisfaction of learning FLs and Spanish in particular**

Item 13: Learning Spanish is/could be a pleasant experience for me

Item 14: Learning a FL other than Spanish is/could be a pleasant experience for me

### **2. Instrumental orientation**

#### **2.1. Assessing practical value**

Item 15: Learning Spanish is useful

Item 16: Learning a FL other than Spanish is more useful than learning Spanish

#### **2.2. Assessing professional value**

Item 7: Speaking Spanish will help further my career

#### **2.3. Assessing academic priority of FLs**

Item 3: I am taking too many credits as it is, so I do not have time for a FL minor

Item 6: I would like to have more space in my schedule for FL and culture classes

## 2.4. Assessing academic goals

Item 1: I plan to graduate with a minor in Spanish

Item 2: I plan to graduate with a minor in a language other than Spanish

## 3. Integrative orientation

### 3.1. Assessing interest in communicating with U.S. Hispanics

Item 8: The fact that Hispanics are the largest minority group in the U.S. makes it important to learn Spanish in the U.S.

### 3.2. Assessing interest and openness in U.S. Hispanics

Item 18: I find it interesting to learn about Hispanics in the U.S.

### 3.3. Assessing cultural interest and openness in Latin America

Item 17: I find it interesting to learn about Latin American countries

As the reports of the U.S. DoE and the DoD have made clear, in the context of increasing globalization, the development of global competency has become an educational priority for the protection of national interests and the workforce of the 21<sup>st</sup> century. On the one hand, 21<sup>st</sup> century economic transactions require communication exchanges at levels of proficiency that include pragmatic, sociolinguistic, discursive, and cultural competency.

Thus, from the economic and work market perspective, global skills fall under instrumental motivation.

Yet, there is also another aspect of globalization which is more personal and have to do with increasing communications across national borders, and across national groups within national borders. These interactions may fall under the scope of integrative motivation. Therefore, global citizenship skills, although usually considered of instrumental value, they also have integrative value.

## 4. Attitudes toward global citizenship

### 4.1. Assessing interest in developing global citizenship through study abroad

Item 19: I am interested in studying abroad in a country where Spanish is the main spoken language

Item 20: I want to study abroad in a country where English is not the main spoken language

### 4.2. Assessing interest in educational resources to develop global citizenship

Item 21: I am aware of study abroad programs at S&T

Item 22: I am interested in travelling outside the U.S. Item 23: I like to know people from other countries Item 24: If you speak English you don't need to know another language

## Sampling

The sample consists of 436 interviews. The sampling methodology was self-selection/ convenience sample. The participants were undergraduates enrolled in the Spring semester of 2018, of 18 year or older. The questionnaire was typed into Qualtrix survey software and distributed via email using the Qualtrix platform. Responses were collected between April and June 2018.

## Demographic characteristics of participants

According to the demographic variables included in the instrument, the sample had the following characteristics:

1. **Gender:** 241 males (55.5%) 181 females (41.5%); 12 participants preferred nor answer (2.8%) and there were 2 missing answers (0.5%).
2. **Age:** The majority of respondents (n=399; 92%) were between the ages of 18 and 23, and only 31 participants (7%) were between the ages of 24 and 71. There were 6 missing answers (1.4%). The age mean was 21.12 (standard deviation 4.08). Mode was 19 years old (n=94; 21.5%), followed by age 20 (n=93; 21.3%) and 21 (n=91; 20.8%).

3. **Full time vs. part time status:** 429 (98.4%) were full time students and only 7 (1.6%) were not. 88 (20.2%) were freshmen; 108 (23.6%) sophomores; 100 (22.9%) juniors; 135 (31%) seniors; 10 (2.3%) other.
4. **Latino/Hispanic:** Only 27 respondents (6.2%) claimed Latino/Hispanic ethnicity, whereas 399(91.5%) answer negatively, and 8 (1.8%) prefer not to answer.
5. **Race and ethnicity:** Race/ethnicity identification was reported as follows: white: 375 (86%),Black or African American: 9 (2.1%), American Indian / Alaskan native: 5 (1.1%), Asian: 24 (5.5%), Native Hawaiian / Pacific Islander: 2 (0.4%), and other: 20 (4.6%)
6. **Parents with college degree:** 355 (81.4%) had parents with college or graduate degree, and 66(15.1%) did not, and 15 (3.5%) declined to answer.
7. **Town size:** 289 (66.3) grew up in cities or town with at least a population above 10.000; 145grew up in village or communities under 10.000 habitants. There were 2 missing answers. A further break down was categorized as follows: City (100.000+ habitants): N = 137 (31.4%); Town (10.000 to 99.999): N = 155 (35.6%); Village (5.000 to 9.999): N = 70 (16.1%); Community(4.999 or less): N 72 (16.5%).
8. **Majors:** 374 students were completing one major. Of that total, 26 (7%) declared a major in Humanities or Social Sciences and 348 (93%) declared STEM majors. 54 respondents declared to be working on two majors (i.e., a total of 108 majors). Of this total, 15 (13.8%) declared at least one major in the Humanities and Social Science and 93 (86.1%) declared STEM majors. There were two participants completing 3 majors and 100% of this majors were STEM.
9. **Minors:** The number of minors that students were pursuing at the time of the data collection ranges from 1 to 5. To facilitate the reading the data has been tabulated.

Number of minors	Total of respondents	Minors		
		Total	*HSS	**STEM
1	151	151	72 (47.6%)	79 (52.4%)
2	45	90	45 (50%)	45 (50%)
3	9	27	18 (66.6%)	9 (33.4%)
4	1	4	2 (50%)	2 (50%)
5	1	5	5 (100%)	0

**Table 4: Number of minors that participants are pursuing by fields**

\*HSS: Humanities and Social Sciences

\*\*STEM: Science, Technology, Engineering, and Mathematics

10. **Foreign language in HS:** Of the total sample (N=436), 405 (93.1%) had taken foreign language courses before college, 30 (6.9%) answered negatively, and there was one missing answer. The split by years and languages appears in the following table.

Language	n	> 1 year	1 - 2 years	2 - 3 years	4+ years	Total
French	136 (21%)	73 (53.6%)	25 (18.8%)	15 (11%)	23 (17%)	136
German	118 (18.2%)	66 (56%)	12 (10.1%)	12 (10.1%)	28 (23.7%)	118
Russian	74 (11.3%)	67 (90.5%)	1 (1.4%)	1 (1.4%)	5 (6.7%)	74
Spanish	322 (49.5%)	45 (13.9%)	82 (25.4%)	70 (21.7%)	125 (39%)	322
Other	0	0	0	0	0	0
TOTAL	650 (100%)	251 (38.6%)	120 (18.4%)	98 (15%)	181 (28%)	

**Table 5: Foreign languages participants took before college by FL and number of years**

## ANALYSIS AND DISCUSSION

### 1. Attitudes toward the learning of FLs and Spanish in particular

The first group of questionnaire items focuses on different aspects of FL learning.

Section 1.1. measures the interest in learning Spanish, or a FL other than Spanish. Since the alleged level of complexity can affect the decision of studying FLs, section 1.2. explores this variable. The last two sections, address dimensions of subjective dispositions towards Spanish as a FL and towards FLs other than Spanish.

### 1.1 Assessing interest in learning FLs and Spanish in particular

Item 4: I am interested in learning Spanish

Item 5: I am interested in learning a FL but not Spanish<sup>3</sup>

The first item reports the interest in Spanish. The statement is straight-forward, and clearly formulated. It assumes a participant who may or may not know the language but can improve its level of competency. Participants' overall reaction to the statement is positive since 64.9% (n=281) chooses *strongly* or *somewhat agree*. The categories with the highest frequency of response are the two just mentioned with virtually equal number of responses. The next highest in frequency is *not at all* (14.7%, n=64), followed by the neutral answer (10.9%, n=47), and finally 9.5% (n=41) chooses somewhat disagree. If we combine the neutral and the negative answers, the figure adds up to 35.2% (n=154).

Similar figures emerge for item 5: the positive answers sum 63.7% (n=277), what means that in both cases more than 35% react neutrally or negatively to items 4 and 5, i.e., 35.2% for Spanish and 36.2% for FLs. If we are persuaded that FL skills are a key component of global citizenship, and if we agree with the premise that one of the main responsibilities of the education system is to prepare graduates to successfully meet the demands of the future's workforce, I find the 35% figure problematic.

### 1.2. Assessing cognitive demands of FL learning and Spanish in particular

Item 11: Learning Spanish is/would be challenging

Item 12: I find learning FLs challenging but not Spanish

In the field of psychology of motivation, one of the factors that affect tasks' motivation is the perception of the task rather than the task itself (Williams and Burden 1997: 104). The expectancy of success, i.e., *Can I succeed at learning FLs?*, is one of the filters that affects our disposition encouraging or deterring us from pursuing the task (Dörnyei 2001: 21).

Items 11 and 12 are designed to assess the degree of complexity perceived by the participants in the learning of FLs. In relation to item 11, for an important majority of participants (72.9%, n=317) Spanish ranges from *moderately to not challenging*, with the highest frequency on *moderately challenging* (46.9%, n=204). In addition, only 9.4% (n=41) thinks it is extremely challenging. Same pattern of answers emerges for the difficulty of FLs: the majority (68.6%, n=297) chooses *moderately challenging* or less, with the highest frequency of response being *moderately challenging* (47.3%, n = 205). Only 8.5% (n=37) chooses extremely challenging.

That Spanish is perceived as easy to learn is a general belief in the U.S. confirmed by research. For example, Horwitz (1988: 286) reported that for her participants Spanish was much easier than French and German. Yet, Horwitz finding is only partially confirmed by our data since there does not seem to be a significant difference between Spanish and other FLs in terms of difficulty.

### 1.3. Assessing appeal of learning FLs and Spanish in particular

Item 9: Learning Spanish is/would be engaging<sup>4</sup>

Item 10: I find learning FLs engaging but not Spanish<sup>5</sup>

The items in this and the next section target subjective reactions. Merriam-Webster defines *engaging* as a task or situation tending "to draw favorable attention or interest". For the Oxford Dictionary of English, it is a synonym of

<sup>3</sup> The statement corresponding to item 5 can be paraphrased as *I am interested in learning a FL other than Spanish*. Neither the statement nor the paraphrase are ambiguous, although the wording of the paraphrase is more felicitous. However, the wording of the item could be problematic because the item contains two nuclei of content: *I am interested in learning a FL* and *I am not interested in learning Spanish*. This situation may lead participants to choose a response thinking of both propositional contents or just the first part of it if the individual is interested in a FL and also in Spanish. The item was designed to register negative reactions towards Spanish versus other FLs, as can be perceived in the statement. However, I will not risk any conclusion about negative reactions and will simply interpret the item as transmitting a basic attitude toward the study of any FL.

<sup>4</sup> I want to thank all the colleagues from German, English and Psychology who took their time to read some of the items and give me some valuable input. Of a total of 7 colleagues only 2 pointed out that the word *engaging* did not sound right in that context. However, the questionnaire was already out, so I couldn't change it. The other 5 did not make any comment so I thought it was at least somewhat acceptable for them.

<sup>5</sup> This question has the same problem explained for item 5. The statement is unambiguous with a negative attitudinal nuance towards Spanish, but contains two propositional contents that might interfere with the negative nuance. Consequently, I will not consider the negative component in my interpretation.

*charming* and *attractive*. So, is it Spanish appealing to our participants? Although the majority (55.4%, n=241) chooses the range from neutral to negative answers –*moderately, slightly, or does not describe my feelings*– a numerically important minority (44.6%, n=194) feels that the propositional content ‘Spanish is engaging’ *clearly, or mostly describes [their] feelings*.

The previous pattern of response does not emerge for FLs. First a much larger majority (73.7%, n=241) chooses the range from neutral to negative answers –*moderately, slightly, or does not describe my feelings*– with the highest concentration (47.2, n=205) on the negative answer *does not describe my feelings*.

#### 1.4. Assessing satisfaction of learning FLs and Spanish in particular

Item 13: Learning Spanish is/could be a pleasant experience for me

Item 14: Learning a FL other than Spanish is/could be a pleasant experience for me

The items in this section refer to the subjective dimension of *satisfaction*. The meaning of the word *pleasant* as defined by the Meriam-Webster is *that produces pleasure*. For the Oxford, *pleasant* signifies something that generates *a sense of happy satisfaction or enjoyment*. Is it learning Spanish *pleasant*? Not much for the majority (54.4%, n=237). For them, the statement either *moderately, slightly, or does not describe [their] feelings*. Yet, a substantial minority (45.6%, n=198) chooses the positive responses –*clearly, or mostly describes my feelings*. A quick comparison between the current figures and those for item 9 will make you realize that the pattern of response is almost identical. In other words, for Spanish, appeal and satisfaction elicit the same responses.

As for FLs, a modest majority (54.7%, n=238) says that either *clearly, or mostly describes my feelings*, and a significant minority (45.3%, n=197) chooses the neutral and negative answers. This represents a noteworthy deviation from the results for item 10. We just mentioned that for Spanish, appeal and satisfaction elicit the same responses; not for FLs.

Looking only at the positive answers, the propositional content *I find learning FL engaging* elicits only 26.3% (n=114) of positive answers, i.e., *clearly, or mostly describes my feelings*. In contrast, the propositional content *I find learning FLs pleasant* generates a 54.7% (n=239) of positive answers. Simplifying to make the argument clear, excluding Spanish, most respondents do not find the learning of FLs appealing, although the majority finds it satisfactory.

## 2. Instrumental orientation

*Instrumental orientation* refers to the goals that motivate us to acquire a FL. This orientation presupposes a thought process of cost and benefits: i.e., FL learners are rational agents involved in the process of deciding how to use their limited resources (such as time, money, etc.) in the most efficient way, in order to obtain maximal profits. In the case of human beings, profit ultimately means well-being (Grin 1999: 10). Thus, *instrumentality* is controlled by the principle of *efficient resource allocation*. One question considered in the field of language and economy is why do we learn certain languages? Even though the reasons are determined by the specifics of the sociolinguistic situation, one general principle has been set: the more individuals speak a given language, the more beneficial it becomes to learn such language creating a snow-ball effect (Grin 1999: 16). This principle positions the Spanish language in the U.S. in an advantageous position.

### 2.1. Assessing practical value

Item 15: Learning Spanish is useful

Item 16: Learning a FL other than Spanish is more useful than learning Spanish

Is it practical to learn Spanish in the U.S.? According to a study published by the *Instituto Cervantes*, “[t]he United States is now the world’s second largest Spanish-speaking country after Mexico” (Burgin 2015). In about 30 more years, according to several predictions, it will topple Mexico. In this context, one would think that the pattern of answers would be an overwhelming majority strongly agreeing with the statement. Yet respondents did not react that way. Although the majority (60.2%, n=262) believes it is *extremely* or *very useful*, almost 40% (n=160) considers it either *moderately, slightly, or not useful*. It is also interesting to point out that only 34% (n=148) considers Spanish extremely useful.

As for the usefulness of other FLs, for 69.4% (n=301) they are *moderately, slightly, or not useful*. Only 30.6% (n=133) thinks they are *extremely* or *very useful*.

These figures show either lack of information or some type of ideological stance interfering with the thought process of a rational actor assessing the instrumental value of Spanish in the U.S. Since we are only assessing the instrumental value of the language and not the ideological underpinnings, that 40% of respondents mark the instrumental value of Spanish at the level of moderate or less it has to be related to the fact that the

frequency of contact with U.S. Hispanics is low, so they do not clearly perceive the need. The same lack of information but in a larger context of globalization, explains the figures for their perceived lack of usefulness for FLs.

## 2.2. Assessing professional value

Item 7: Speaking Spanish will help further my career

One can imagine that if they do not perceive the practical value, a narrower value goes unperceived as well, and that is correct. Figures for practical and professional value are almost identical. The majority (62.8%, n=273) *strongly*, or *somewhat agree* that Spanish will increase their professional value. For 37.2% (n=162) the increase in value is moderate or less.

## 2.3. Assessing academic priority of FLs

Item 3: I am taking too many credits as it is, so I do not have time for a FL minor

Item 6: I would like to have more space in my schedule for FL and culture classes

At the beginning of this section, we saw that part of the rational process of resource allocation is to assess how to make the best use of limited resources, such as time. In this framework, taking or not FL classes is part of this assessment. The question is this: is it an academic priority for our sample of students to take FL courses? Consistent with the pattern of replies that has been emerging, 62.3% (n=270) agree or strongly agree with the statement, i.e., they do not have time for FL because they are already taking too many credits. I have not studied the curriculum of careers at S&T, and some might be too demanding and/or leave too little room for the humanities. However, in the majority of cases, I think it is just a matter of priorities and the previous responses confirm that students do not have in hold high in their pecking order the instrumental value of Spanish and FLs in general.

Would they take FLs and culture classes if they have the time? The majority (70%, n=313) says they would. A 30% (n=130) of the sample would not.

## 2.4. Assessing academic goals

Item 1: I plan to graduate with a minor in Spanish

Item 2: I plan to graduate with a minor in a language other than Spanish

Finally, we are able to discuss the cornerstone of instrumental value. If you really believe FLs have instrumental value, then the most logical course of action is to obtain some type of official recognition, be it a major, a certificate, a minor concentration, etc. The academic goal of our sample is not to graduate with a minor in Spanish or FLs. The overwhelming majority 87.5% (n=380) choose either the neutral, *neither likely nor unlikely*, or the negative categories, *somewhat* or *extremely unlikely*. The category with the highest frequency of response is *extremely unlikely* (74.3%, n=323). Only a meager minority of 12.5% (n=54) says that it is extremely or somewhat likely.

## 3. Integrative orientation

Whereas the instrumental value presupposes a pragmatic calculation, the integrative value is based on an ideological assessment. This is an aspect that has not been a major focus of SLA until recently. First, we need to agree with Gardner (1985) that the study and teaching of a L2 not like other subjects of instruction. The setting in which it occurs and the fact that it had to adapt to fit into the schooling institution had deemphasized important distinctive features. Not only students have to *cognitively* learn new information unavailable in their own culture but also have to *cognitively* and *bodily* incorporate symbolic elements of a different ethnolinguistic community [...] Furthermore, the student is not

asked to learn about them; he is being asked to acquire them, to make them part of his own language reservoir. This involves imposing elements of another culture into one's own lifespace [sic]. As a result, the student's harmony with his own cultural community and his willingness or ability to identify with other communities become important considerations in the process of second language acquisition (Gardner 1979 -quoted on Dörnyei 2001: 47)

*Integrativeness* implies not only “the positive disposition towards the L2 group and the desire to interact with [them]” but ultimately “to become similar to valued members of that community” (Gardner and Lambert 1959 – quoted on Dörnyei 2001: 49).

### 3.1. Assessing interest in communicating with U.S. Hispanics

Item 8: The fact that Hispanics are the largest minority group in the U.S. makes it important to learn Spanish in the U.S.

It seems only common sense that ethnic groups<sup>6</sup> coexisting in a sociopolitical unit have a positive disposition towards satisfactory communicative interactions. It is also reasonable in a multilingual polity that the burden of communication is not disproportionate placed on one group, especially if this group is disadvantaged by the lack of access to resources. The only reason to think that the previous claims are unfair is to hold a nationalist ideology. This seems to be the case since the majority 57.3% (n=250) agrees with item 8 either *moderately*, *slightly*, or *not at all important*. Yet, the minority is numerically important (42.7%, n=186), although only 23.4% (n=102) considers it *extremely important*.

### 3.2. Assessing interest and openness in U.S. Hispanics

Item 18: I find it interesting to learn about Hispanics in the U.S.

The same reasoning provided above applies to item 18. If you want to live in a healthy polity, you should be aware of the culture and social concerns of the largest minority in order to at least achieve a better understanding of this community. An important majority (74.3%, n=323) reports that they find it *moderately*, *slightly*, or *not interesting at all*. The highest frequency of response (29%, n=126) is on *slightly interesting*, with almost one in five (18.6%, n=81) *not interesting at all*. Finally, only 11% (n=48) finds it *extremely interesting*.

### 3.3. Assessing cultural interest and openness in Latin America

Item 17: I find it interesting to learn about Latin American countries

Item 17 widens the scope of the previous two.

Since most U.S. Hispanics ethnic ties are rooted in Latin America, interest in that region, or lack thereof, represents interest and concern for historical and cultural understanding. The results are consistent with the two previous answers: the majority 67.1% (n = 292) finds it *moderately*, *slightly*, or *not interesting*. *Moderately interesting* is the category with the highest number of response 27.8% (n = 121). The two positive answers add up to 32.9% (n = 143), with *extremely interesting* (16.6%, n = 72) having the highest frequency of the two.

Something worth pointing out is the contrast among responses for the last two items. There is more interest in Latin American countries than in the U.S. Hispanic community. The positive answers for item 17 (interest in Latin America) is 32.9% (n=143) versus 25.7% (n=143) for item 18 (interest in U.S. Hispanics). Similar results are obtained when we compare frequencies for *extremely interesting*: for interest in Latin America the frequency is 16.6% (n=72), for interest in U.S. Hispanics it is 11% (n=48).

To conclude this section, it seems that integrative orientation does not represent a positive solid drive among participants. This result is consistent for all of three items included in the questionnaire in reference to the ethnic language, the U.S. Hispanics, and the wider interest in historical and cultural roots of the ethnic minority.

## 4. Development of global citizenship

For the 19<sup>th</sup> and 20<sup>th</sup> centuries, nationalism was the ideological substratum that framed our way of thinking about the world and the relations *inter-nations*. Starting in the last decades of the 20<sup>th</sup>, rapid and far reaching changes have brought to light the contradictions underlying the nationalist thought marking it as outdated. New global developments in economy, technology, the atmosphere and ecosystems have brought about a fast and uneven process of globalization. Thus,

[t]he growing global interdependence that characterizes our time calls for a generation of individuals who can engage in effective global problem solving and participate simultaneously in local, national, and global civic life. Put simply, preparing our students to participate fully in

<sup>6</sup> I consider white Americans an ethnic group, as much as minorities are considered ethnic. For a discussion see, for example Apadurai () or Banks ()

today's and tomorrow's world demands that [will] nurture their global competence (Asia Society, 2011)

According to this advocacy group, “[g]lobal competence is the capacity and disposition to understand and act on issues of global significance.” (Asia Society, 2011)

So what is *global citizenship*? A Scotland based advocacy group provides the following definition:

It is a way of living that recognises our world is an increasingly complex web of connections and interdependencies. One in which our choices and actions may have repercussions for people and communities locally, nationally or internationally (*Ideas for Global Citizenship*n.d.)

Therefore, “[e]ducation for global citizenship deals with issues of global interdependence, diversity of identities and cultures, sustainable development, peace & conflict and inequities of power, resources & respect.” (*Ideas for Global Citizenship* n.d.)

#### 4.1. Assessing interest in developing global citizenship through study abroad

Item 19: I am interested in studying abroad in a country where Spanish is the main spoken language

Item 20: I am interested to study abroad in a country where English is not the main spoken language

One of the main mechanisms that have been put in practice in order to develop global competency and citizenship is facilitating different types programs for studying abroad. In consequence, interest in these programs is considered an indicator of the perception of the importance of these types of competency as part of their education.

Item 19 elicits these dispositions in relation to the Hispanic world. The answers do not break apart from the previous trends. A large majority (78.1%, n=339) reports a *moderate amount* of interest or less. The category with the highest frequency of response by far is *none at all* (39.6%, n=172). Only 14.3% (n=62) has a *great deal* of interest.

The majority of respondents (58.6%, n=254) has a *moderate, a little, or none at all*. However, contrasted with the previous item the size of the majority is significantly smaller. Also noteworthy is that the highest frequency of responses is on the most positive option *a great deal* (26.4%, n=115).

Comparing patterns of answers, it seems the majority has little interest in global issues from the perspective of Spanish speaking countries and the world, although the negative trend is much more intense for the Hispanic world.

#### 4.2. Assessing interest in educational resources to develop global citizenship Item 21: I am aware of study abroad programs at S&T

How much interest participants have in studying abroad? Almost one in six have a *moderate, a little, or none at all* (59.5%, n=258). The category with higher number of responses is a *moderate amount*. Still, the minority choosing positive responses is somehow important (40.5%, n=176). Interestingly only 8% (n=35) is not aware at all.

#### 4.3. Assessing some ethnocentric tendencies

Item 22: I am interested in travelling outside the U.S

Item 23: I like to know people from other countries

Item 24: If you speak English you don't need to know another language

For item 23, an overwhelming majority (79.3%, n=345) is interested in travelling outside the U.S. either a *great deal* or *a lot*. Of this figure 64.8% (n=282) has a *great deal* of interest.

Only 17% (n=74) has a *moderate or a little amount of interest*, and an insignificant minority (3.7%, n=16) is not interested. These numbers indicate that the majority is open to visit and interact with other cultures but they do not perceive it as an educational or professional asset in itself.

Compared to the previous item, even a larger majority (84.4%, n=369) likes to know people from other countries either a *great deal* or a *like somewhat*, with the highest frequency of response on the most positive category, *like great deal* (56.1%, n=244). The neutral response, *nor like nor dislike*, represents only 13.6% (n=59), and the negative responses sum 1.6% (n=7).

Therefore, there is a positive disposition for multiculturalism in this pattern of responses.

The last item is about linguistic ethnocentrism. An important majority either somewhat disagree or strongly disagree with the statement (75.8%, n=330). Participants who strongly agree or somewhat agree make up 12.5% (n=54), but only and insignificant minority (3.4%, n=15) strongly agree. Finally, the neutral answer, *neither agree*

or disagree, represents 11.7% (n=51) of the total.

The items related to study abroad (19, 20, 21) consistently show a majority of responses on the neutral and negative side of the scales. The items related to ethnocentrism present the opposite pattern: the majority is concentrated on the positive answers<sup>7</sup>. These results seem to indicate that their dispositions towards global competency are probably based on lack of information and a narrow perception of the world more than on ethnocentrism.

## SUMMARY OF FINDINGS, AND CONCLUSIONS

### 1. Attitudes toward the learning of FLs and Spanish in particular

From the point of view of interest in learning FL and Spanish in particular, the majority of participants declares a positive interest in learning Spanish and FLs. However, about 35% is little or not interested at all. As we have already remarked, this minority is large enough to be worrisome, given the importance of FLs and cultural literacy in the 21<sup>st</sup> century and the dimensions of the FL deficit in the U.S. Therefore, some action should be implemented in order to educate this 35% on the importance of FL learning.

As for the cognitive dimension, students do not consider neither FLs nor Spanish a difficult topic. Therefore, the low enrollments in our FL courses do not seem to be related to negative expectancy of success. Subjective attitudes towards both, Spanish and FLs are not as positive as interest. In general, the majority does not consider Spanish or FLs neither appealing nor satisfactory.

Therefore, high level of interest, and high level of expectancy of success on the one hand, and low levels of personal subjective rewards, such as engagement and satisfaction seem to pose a contradiction. In my opinion, the high level of interest is the result of a social desirability bias.

### 2. Instrumental orientation

Is it practical to learn Spanish in the U.S.? The majority believes it is, however a significant minority (40%) considers it *moderately* useful or less. As for FLs other than Spanish, the majority thinks *moderately* useful or less.

As previously observed, these figures show that disinformation and/or ideology underlie this pattern of answers. The fact that only 40% of respondents marked the instrumental value of Spanish at the level of moderate or less it has to be explained as a biased perception based on low frequency of contact with U.S. Hispanics or the interference of negative ideologies towards this ethnic minority. The same lack of information but in a larger context of globalization, explains the figures for their perceived lack of usefulness for FLs.

Figures for practical and professional value are almost identical. The majority agrees that Spanish will increase their professional value, with a significant minority considering its value as moderate or less.

Is it an academic priority for our sample of students to take FL courses? The answer seems to be negative since the majority do not have time for FLs because they are already taking too many credits. However, the majority claims that they would like to take FLs and culture classes if they had the time. Again one can only wonder if the latter claims reflects what they would really do or what they say they would do, based on social desirability.

Do participants plan to graduate with a minor in Spanish or in other FLs? The overwhelming majority thinks it is extremely unlikely.

Once again we have a contradiction similar to the one posed at the end of the previous section: In general, the majority is aware of the practical and professional value of Spanish, however, a meager minority actually plans to graduate with a minor in Spanish or a FL.

### 3. Integrative orientation

Integrative orientation does not seem to impact our participants. The majority considers that it is moderately important or less to learn Spanish for integrative reasons. In addition, an important majority finds it moderately interesting or less to know about U.S. Hispanics. Finally, the majority is moderately interested or less in Latin American countries. Something worth pointing out is that there is more interest in Latin American countries than in the U.S. Hispanic community.

In sum, it seems that integrative orientation is not a factor among participants. This result is consistent for all of the three items included in the questionnaire in reference to the ethnic language, the U.S. Hispanics, and the wider interest in historical and cultural roots of the ethnic minority.

<sup>7</sup> Notice that the way item 24 is worded, from the point of view of global competency, the negative answers are in fact positive

#### 4. *Development of global citizenship*

Are participants interested in studying abroad? The majority declares a moderate amount of interest, although there are less participants interested in Hispanic countries, than in other countries. When asked about how much they know about study abroad programs at S&T, almost one in six have moderate to none.

However, the overwhelming majority is interested in travelling outside the U.S., even a larger majority likes to know people from other countries, and an important majority disagrees with the statement that “if you know English, you don’t need to know another language.”

Although interest in studying abroad seems to be meager, items related to ethnocentrism present the opposite pattern, with the majority concentrated on the positive answers. These results seem to indicate that their dispositions towards global competency are probably based on lack of information and a narrow perception of the world more than on ethnocentrism.

#### Works Cited

- Abello-Contesse, Christian. 2009. Age and the critical period hypothesis. *ELT Journal*, 63/2 April. <https://academic.oup.com/eltj/article/63/2/170/441108>. Accessed: May 2010.
- Anderson, Benedict. 2006. *Imagined Communities Reflections on the Origin and Spread of Nationalism*. London: Verso
- Appadurai, Arjun. 2006. *Fear of Small Numbers: An Essay on the Geography of Anger*. Durham, N.C.: Duke University Press.
- Boix Mansilla, Veronica, & Anthony Jackson. 2011. *Educating for Global Competence: Preparing Our Youth to Engage the World*. New York: Asia Society.
- Banks, James A. 2008. *Teaching Strategies for Ethnic Studies*. Boston, MA: Pearson.
- Burgen, Stephen. 2015. US now has more Spanish speakers than Spain only Mexico has more. *The Guardian*, June 29. <https://www.theguardian.com/us-news/2015/jun/29/us-second-biggest-spanish-speaking-country> Accessed: October, 2017.
- Colby, Sandra L., & Jennifer M. Ortman. 2015. *Projections of the Size and Composition of the U.S. Population: 2014 to 2060*. Washington, D.C.: U.S. Department of Commerce Economics and Statistics Administration, U.S. CENSUS BUREAU. <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf> Accessed: October, 2017.
- Damari, Rebeca R., et al. 2017. The Demand for Multilingual Human Capital in the U.S. Labor Market. *Foreign Language Annals*, Vol. 50, NO.1, 13-37.
- Devlin, Kat. 2015. *Learning a foreign language a ‘must’ in Europe, not so in America*. Washington, D.C.: Pew Research Center. <http://www.pewresearch.org/fact-tank/2015/07/13/learning-a-foreign-language-a-must-in-europe-not-so-in-america/> Accessed: October, 2017.
- Dörnyei, Zoltan. 2001. *Teaching and Researching Motivation*. Essex: Pearson Education
- Eddy, Peter A. 1980. Foreign Languages in the USA: A National Survey of American Attitudes and Experience. *The Modern Language Journal*, Vol. 64, No. 1, Spring, pp. 58-63
- Edwards, John. 1995. *Multilingualism*. London: Penguin Books.
- Friedman, Amelia. 2015. America's Lacking Language Skills Budget cuts, low enrollments, and teacher shortages mean the country is falling behind the rest of the world. *The Atlantic*, May 10. <https://www.theatlantic.com/education/archive/2015/05/filling-americas-language-education-potholes/392876/> Accessed: October, 2017.
- Fry, Richard. 2015. *Class of 2025 expected to be the biggest, most diverse ever*. Washington, D.C.: Pew Research Center. <http://www.pewresearch.org/fact-tank/2015/09/11/class-of-2025-expected-to-be-the-biggest-most-diverse-ever/> Accessed: October, 2017.
- Gardner, Robert C. 1985. *Social Psychology and Second Language Learning. The Role of Attitudes and motivation*. London: Edward Arnold.
- Grin, François. 1999. Economics. In: Joshua A. Fishman (ed.) *Handbook of Language and Ethnic Identity*, pp. 9-24. New York: Oxford University Press.
- Horwitz, Elaine K. 1988. The Belief about Language Learning of Beginning University Foreign Language Students. *The Modern Language Journal*, Vol. 72, NO. 3, pp. 283-294.
- Ideas for Global Citizenship. n.d. *What is global citizenship?* <http://www.ideas-forum.org.uk/about-us/global-citizenship> Accessed: July, 2018.
- Jiraffales, William. 2007. *Monolingual Americans. Why we can't learn foreign languages*. Lincoln, NE.: iUniverse.
- Jones, Jeffrey. 2013. *Most in U.S. Say It's Essential That Immigrants Learn English*. Princeton, N.J.: Gallup. <https://news.gallup.com/poll/163895/say-essential-immigrants-learn-english.aspx> Accessed: October, 2015.
- Lambert, Richard D. 1987. The Improvement of Foreign Language Competency in the U.S. *Annals of the American*

- Academy of Political and Social Sciences*, Vol. 490, pp. 9-19. Lenneberg, E. H. 1967. *Biological Foundations of Language*. New York: John Wiley & Sons.
- McComb, Chris. 2001. *About One in Four Americans Can Hold a Conversation in a Second Language*. Princeton, N.J.: Gallup. <https://news.gallup.com/poll/1825/about-one-four-americans-can-hold-conversation-second-language.aspx> Accessed: January, 2015
- Merriam-Webster's Collegiate Dictionary, 11th Edition*. 2014. Versailles, KY: Merriam-Webster.
- Nardelli, Alberto. 2014. Most Europeans can speak multiple languages. UK and Ireland not so much. *The Guardian*, September 26. <https://www.theguardian.com/news/datablog/2014/sep/26/europeans-multiple-languages-uk-ireland> Accessed: October, 2017.
- Paton, Graeme. 2013. Three-quarters of adults 'cannot speak a foreign language.' *The Telegraph*, November 20. <https://www.telegraph.co.uk/education/educationnews/10460432/Three-quarters-of-adults-cannot-speak-a-foreign-language.html> Accessed: October 2017.
- Porcel, Jorge. 2006. The paradox of Spanish among Miami Cubans. *Journal of Sociolinguistics*, 10/1: 93-110.
- Porcel, Jorge. 2011. Language Maintenance and Language among U.S. Hispanics. In: Manuel Díaz-Campos (ed.). *The Handbook of Hispanic Sociolinguistics*. Malden (Massachusetts); Oxford: Wiley Blackwell.
- Pufahl, Ingrid, & Nancy C. Rhodes. 2011. Foreign Language Instruction in U.S. Schools: Results of a National Survey of Elementary and Secondary Schools. *Foreign Language Annals*, Vol 42, NO. 2, pp. 258-288.
- Reber, Arthur S. 1995. *The Penguin Dictionary of Psychology*. London: Penguin Books. *Oxford Dictionary of English, 3<sup>rd</sup> Edition*. 2010. Oxford: Oxford University Press.
- U.S. Department of Defense. 2011. *Department of Defense Strategic Plan for Language Skills, Regional Expertise, and Cultural Capabilities*. Washington, D.C.: U.S. Department of Defense.
- U.S. Department of Education, 2011. *Succeeding Globally Through International Education and Engagement. U.S. Department of Education International Strategy 2012–16*. Washington, D.C.: U.S. Department of Education.
- Vieira, Nancy. 2008. *The American Attitude Toward Foreign Language Education from the 1700's to 2006*. University of Pittsburgh. (Unpublished doctoral dissertation)
- Weber, Gretchen. 2004. Intel's Internal Approach. *Workplace*, May 3 <http://www.workforce.com/2004/05/03/intels-internal-approach/> Accessed: August 10, 2018.
- Weinreich, Uriel. 1953. *Languages in Contact*.
- Williams, Marion, & Robert L. Burden. 1997. *Psychology for Language Teachers. A socialconstructivist approach*. Cambridge: Cambridge University Press.

### Acknowledgement

The project was funded by the U.S. Dept. of Education and quoted the name and number of the grant accurately.