


## Descriptive Comparison of Hispanic Doctoral Students (2007-2014) with Carnegie Initiative of the Doctorate National Survey Results



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### ABSTRACT

One hundred doctoral students and graduates of a doctoral program in education on the Mexico border were asked to complete a survey developed by the Carnegie Initiative on the Doctorate (CID). According to the CID developers, Walker, Golde, Jones, Bueschel and Hutchings, “the purpose of the survey is to examine the relationship between student experiences in a doctoral program and the outcomes of doctoral education. The survey addresses the full range of responsibilities which may be expected of a holder of the doctorate including research, teaching, and the application of knowledge and skills in the discipline to practical problems in the world outside the university.” Fifty percent of those surveyed responded.

**Keywords:** Hispanic education, Graduate education, CID, Doctoral education.

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## 1. INTRODUCTION

### 1.1. Purpose

The purpose of the research is to analyze results comparing Hispanic doctoral student responses to those of doctoral students across the nation based on the Carnegie Initiative on the Doctorate (CID). The convenient sample consisted of all students who had been accepted into the Education Doctorate program since its approval from the Higher Education Coordinating Board in July of 2007. Participation by students and graduates was voluntary. One professor from the department where the program is housed collected data. Participants were primarily first and second-generation immigrants from Mexico, South America, and Cuba and often the first in their family to attend an institution of higher learning.

The researcher posed the question: *What is the purpose to doctoral education?* Golde and Walker (2006) in *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline*: “...propose that the purpose of doctoral education, taken broadly, is to educate and prepare those to whom we can entrust the vigor, quality, and integrity of the field. This person is a scholar first and foremost, in the fullest sense of the term---someone who will creatively generate new knowledge, critically conserve

valuable and useful ideas, and responsibly transform those understandings through writing, teaching, and application. We call such a person a “steward of the discipline”.

## 1.2. Perspectives

The Higher Education Coordinating Board approved the revised mission statement of the university at the October 27, 2005, meeting. A request for Preliminary Planning Authority was approved by the system on November 10, 2005, and by the Higher Education Coordinating Board on January, 26 2006. Approval of the proposed doctorate in education was received from the System on November 15, 2006. In addition, approval of the proposed program from the Southern Association of Colleges and Schools (SACS) was granted on December 11, 2006. Subsequent approval at the Higher Education Coordinating Board occurred at the July 2007 meeting.

The Doctor of Education (Ed. D.) in Curriculum and Instruction prepares educators to assume leadership positions in institutions of higher education, local, regional, and independent school districts at multiple levels. The education doctorate in Curriculum and Instruction provides school districts throughout the state and nation with individuals who have sufficient and specific expertise to formulate and lead P-16 programs. In addition, the degree enables successful candidates to teach in colleges and universities, many of which are faced with a shortage of qualified minority faculty. To this end, the degree should provide a qualified pool of minority educators for the state and the nation.

According to curriculum theorists, we find that as stated by Tyler (1949/2009) education is a process that aims to change the behavior of the people. Dewey (1929/2009) mentions that an individual, to be educated, is a social individual, as the educational process is psychological and sociological at the same time. Argue that the field of curriculum is interested in understanding the relationship between individuals, the curriculum and society. Conceptualize curriculum as a dynamic field, resultant from social activity, and designed for both present and emerging purposes. The institution has a 96% Hispanic population. The Ed. D. curriculum was designed to meet the needs of the Hispanic population.

According to [Richardson \(2006\)](#) the doctorate in education generates new knowledge, understands the intellectual history of the field, uses the best ideas and practices in current work, and represents that knowledge to others within and outside the field (pg. 257).

[Richardson \(2006\)](#) states that doctoral students likewise enter their programs in education with strong beliefs about the nature of teaching and schooling, often based on their experience in the educational system as students, teachers and administrators. These experiences are very helpful in the doctoral program in bringing constructs and theories together with practice. However, these experiences are often underexamined, leading to beliefs that have little warrant.

In exploring their own beliefs, the doctoral students should become more cognizant of how unwarranted beliefs and misconceptions developed in others and what it might take for others to change their beliefs. It is in the process of examining beliefs, in combination with the formal knowledge they have acquired in the program that will place stewards in a position to work with educators, policymakers, legislators, and the public to raise the level of analysis and understanding about education ([Richardson, 2006](#)). This is a critical element of their role in the stewardship of enterprise.

[Richardson \(2006\)](#) also points out that the doctorate in education students will need to develop expertise in normative, epistemic and rhetorical analysis, research and representation. Doctorate in Education programs must develop the following crucial elements of scholarly inquiry and student learning: have substantive

knowledge of the field, think theoretically and critically, frame fruitful research problems, see research as socially situated, design research, collect and analyze data, communicate with various audiences about research.

According to the “Closing the Gaps by 2015: The ...Higher Education Plan,” one of the goals is to not only increase the higher education participation rate of the Hispanic population of the state by 2015 but to also increase the number of minorities in doctoral programs. The percentage of Hispanics receiving doctorates has risen only slightly from 1991 to 2001. Hispanics receiving doctorates in the United States have only increased from two to three percent and in our state from three to five percent. In the United States Hispanics are proportionally underrepresented in doctoral education in relationship to their numbers in the population. Statistics from a 2008 National Science Foundation report on *Number of US Doctorates Awarded Rise for Sixth Year, but Growth Slower* (Fiegenger, 2009) indicates that 5.5% of individuals earning doctorates in non-science and engineering fields are Hispanic.

The number of doctorates granted in our state is disproportionate. According to the document “Doctoral Education ..., Part I: Past Trends and Critical Issues,” doctoral degrees awarded in 2003, per 100,000 population were the lowest in our specific region (Texas Higher Education Coordinating Board, 2004). Because of the under-representation of this group in doctoral education, they are also underrepresented in fields that require doctoral degrees, such as in academia. The additional specializations in our program (Bilingual Studies, Early Childhood, Educational Technology, Educational Leadership, Higher Education Teaching) will draw from a wider audience of potential students.

Many educators in our area lack the financial means to relocate to pursue doctoral degrees in other parts of the state or nation. One of the goals identified in the “Closing the Gaps by 2015” higher education plan is to increase the number of students completing the doctorate and to increase the number of Hispanic students completing post-secondary programs. Therefore, it is imperative that such a degree with a variety of specializations be accessible to the educators of our region.

Nettles and Millett (2006) found that 40 percent of the doctoral students indicated having used their personal resources to pay tuition and fees, apart from money that they received from assistantships or fellowships. They also found that doctoral students in education work almost 14 hours a week at an unrelated job (Nettles and Millett, 2006). This reflects the circumstance that a much larger proportion of students in education are attending part-time, with many working in schools as well as that Hispanics in every field reported few instances of having a same race mentor. The biggest obstacle appears to be the availability of faculty of the same race.

Thirty-eight percent of education doctoral students expected to become college or university faculty or post-doctoral research fellows (Nettles and Millett, 2006). Education students on average, took the longest time off by far, at almost 12 years.

Nettles and Millett (2006) stated that student faculty interaction is a measure of the relationships that develop between students and faculty outside the classrooms. In all fields, students with mentors reported strong student-faculty social interactions; in fact having a mentor may be the key to positive student-faculty social interactions. With the exception of the field of education, students experienced increasingly negative perceptions of student-faculty social interaction with each passing year of enrollment. Education doctoral students, in contrast to their counterparts in other fields, appear to have higher tolerance for social interactions with their professors, even after being enrolled for a lengthy period of time. Having a mentor seems to be the key predictor of students’ feelings about their academic interactions with faculty. In all fields, students who aspired either faculty or postdoctoral researcher positions on graduation generally rated their interactions with their faculty adviser positively.

Education and social sciences students who expected to have faculty jobs or post-doctoral research positions after degree completion were 1.6 times and 1.9 times respectively, more likely to exhibit research productivity, [Nettles and Millett \(2006\)](#).

## 2. METHODS AND DATA SOURCES

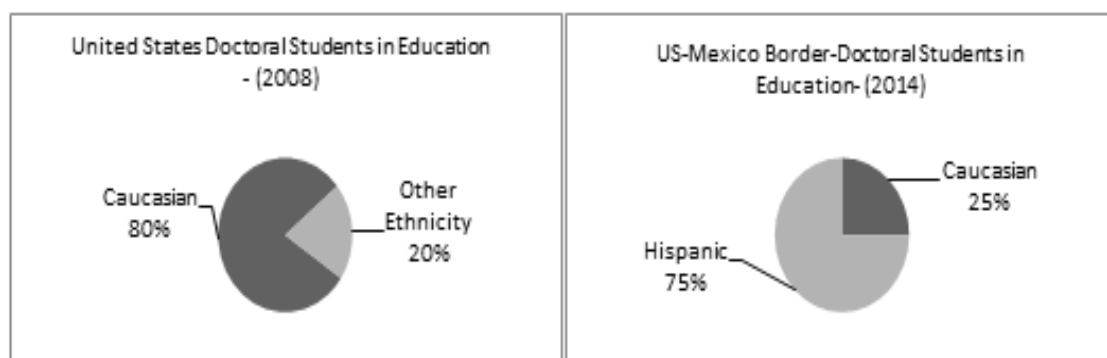
Data collection for this study was conducted in July 2014 with students and graduates of the Ed. D. in Curriculum and Instruction program housed in the College of Education. The survey, developed by the Carnegie Initiative on the Doctorate (CID), was used. Results are compared with national results. The consistency of questions and possible response options on the surveys allow the researchers to make comparisons about students' experiences in the doctoral program. The survey was uploaded to *SurveyMonkey.com* and distributed to 100 doctoral students through email. The response rate of fifty percent was used to construct comparisons.

For the quantitative part of the study the collected data was exported into a *Microsoft Excel* file. Bar charts and pie charts were generated to display results. National results of the survey came from *The Formation of Scholars: Rethinking Doctoral Education for the Twenty-First Century* by [Walker et al. \(2008\)](#). Comparative charts were generated using both of these sources.

## 3. RESULTS

The quantitative survey results that included Likert-type responses and lists were analyzed. Overall, the researchers found that the Hispanic doctoral students are similar to the national group in many areas, but do demonstrate differences. The following charts and graphs concisely convey results in a visual format. Beginning with the demographics we find that our student population is distinctly different than the national representation of doctoral students in education. Nationally we find 80% of all doctoral students in education are Caucasian while our population is 75% Hispanic.

### Demographics

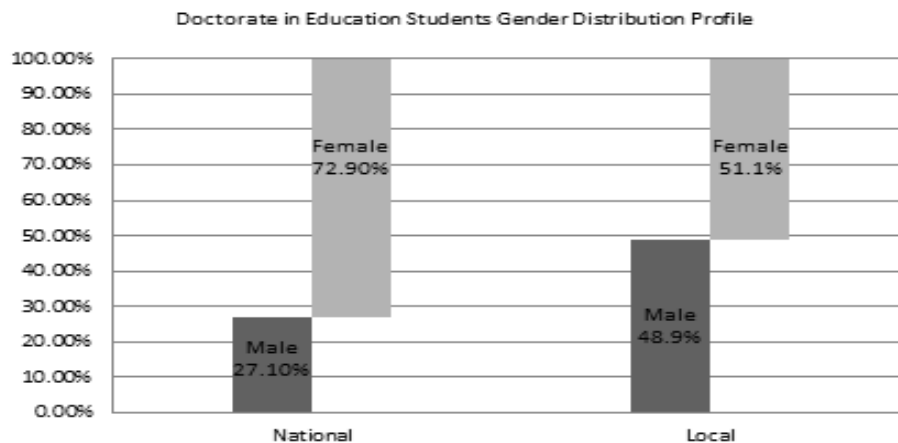


Hispanics are proportionally underrepresented in doctoral education in the United States. Currently, according to the U.S. Census 2013, 38.4% of Texans are of Hispanic heritage, yet only 3-5 % earned doctorates compared to Caucasians at 80.3% of the state's population having 80% of the completed doctorates ([Castellanos and Gloria, 2007](#)). Aligned with the census data the authors of eighty percent of all doctoral students nationally were Caucasian. Our population, on the US-Mexico Border in 2014 was

ninety-six percent Hispanic with seventy-five percent of doctoral students identified as Hispanic and twenty-five percent Caucasian.

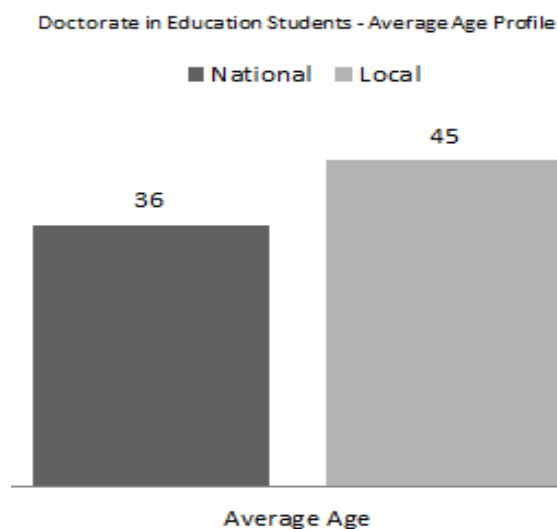
### 3.1. Gender

Nationally the average doctoral student population is 72% female and 27% male. In our community the doctoral student population is 51% female and 49% male. In the first few years of the program the female numbers were much higher, but have moved to the current numbers over a period of seven years.



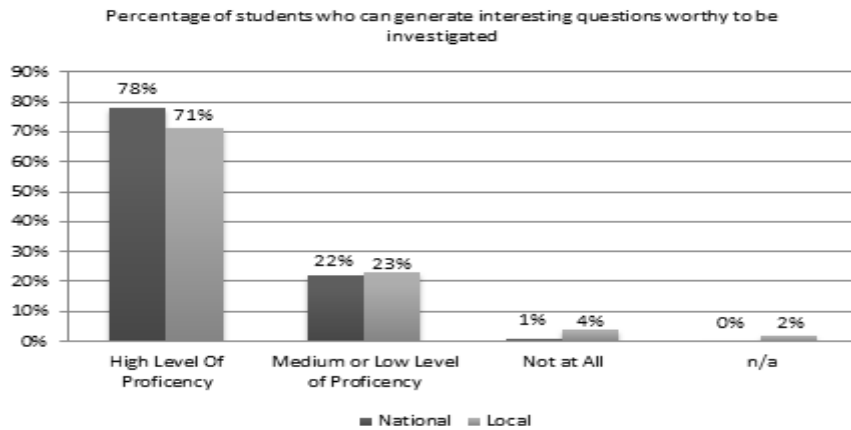
Age:

- The Hispanic students, as a group, have an older average age of 45 compared to 36 in the national survey of doctoral students.



- Research Confidence: Hispanic students indicated that they were less confident in terms of designing and carrying out a line of research on their own than the national group (National=75%, Hispanic=66%).

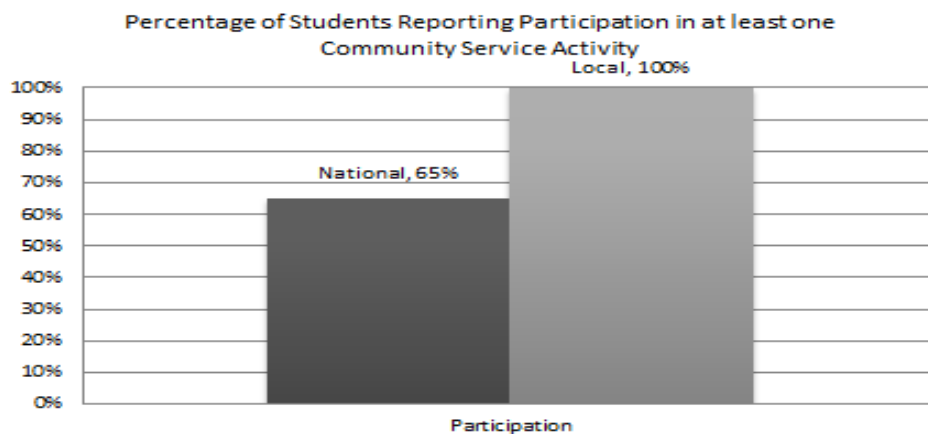
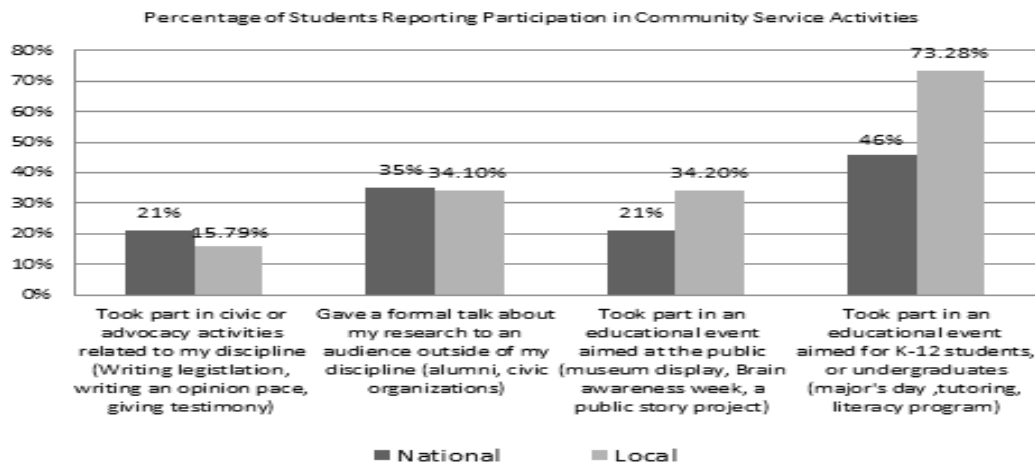
It is very important for students to begin to get to know academics in their field of interest. This might involve preparing students to attend conferences, meeting well-known figures in their field, and learning norms for communicating with these people (Richardson, 2006).



In education, the social sciences and the sciences, publishing an article in a refereed journal carries higher status than presenting a paper at a professional conference. Education students experienced a lower publication rate when contrasted with each of the other fields. In the field of education, publishing in a refereed journal is highly prized accomplishment (Richardson, 2006).

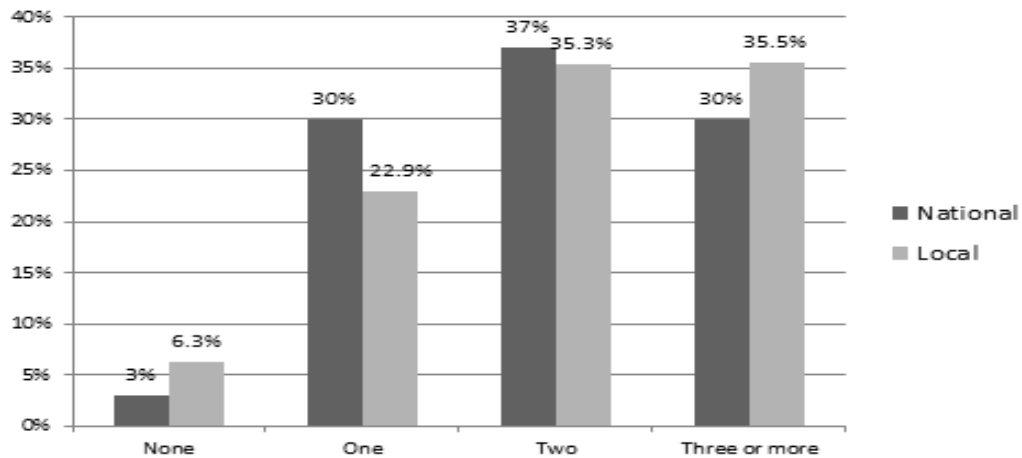
### 3.2. Community Involvement

- The Hispanic group had much greater community service involvement activities than the national group (National=46%, Hispanic=73%).



- Faculty that students identify as Advisors or Mentors: The Hispanic students identified with more faculty more often than the national group (National=30%, Hispanic=35.5%).

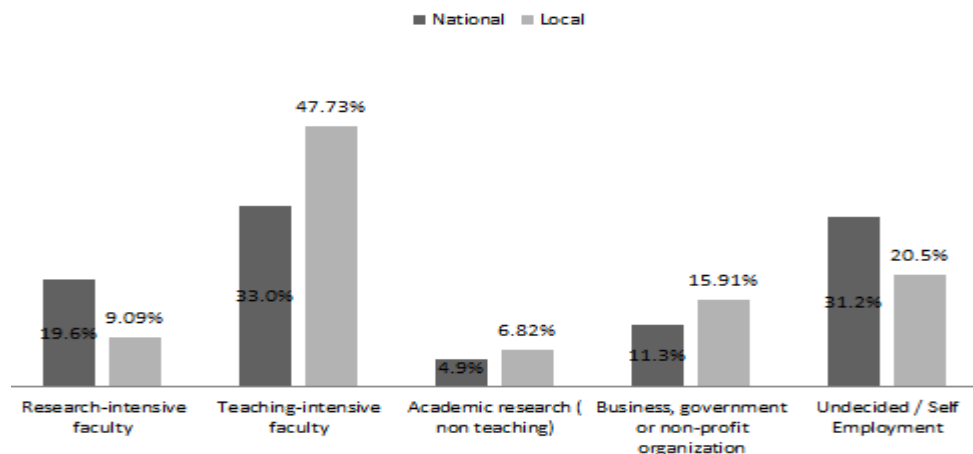
Number of Faculty Advisers or Mentors Students Identify



Nettles and Millett (2006) stated that doctoral programs in essence are where students acquire their understanding of the cultural norms of their future professions, and that the most important way to examine socialization was in terms of student relationship with peers and student relationships with faculty in their roles as advisers and mentors.

- Primary career goal in terms of future goals, Hispanic students focused on teaching intensive rather than researching positions (National=33%, Hispanic=48%).
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Doctorate in Education Students Primary Career Goal



Nettles and Millett (2006) found that 38 percent of education doctoral students expected to become college or university faculty or post-doctoral research fellow. Walker et al. (2008) found that 33 percent of doctoral education students expected be involved in teaching intensive positions at the university level.

Richardson (2006) states that although the students might have an interest in engaging in the scholarship of education, because of certain beliefs they might also be ambivalent about the purpose and use of research; they might even consider it worthless. Because of the beliefs and misconceptions that students bring with them, it is important that students have opportunities throughout the time they are involved in the doctoral program to



explore their beliefs and reflect on alternative conceptions to their sense of both educational scholarship and educational systems.

### 3.3. Educational Importance

This study will bring forth information about Hispanic doctoral students and the special needs and challenges specific to the border region. The results of this study will add to the body of knowledge about how Hispanic border doctoral students compare with doctoral students from across the nation. This will provide valuable information for planning and meeting the needs of the expanding Hispanic doctoral students in the future.

## 4. CONCLUSIONS

The quantitative survey results that included Likert-type responses and lists were analyzed. Overall, the researchers found that the Hispanic doctoral students are similar to the national group in many areas, but do demonstrate differences:

- In terms of future goals, Hispanic students focused on teaching intensive rather than researching positions (National=33%, Hispanic=48%). As noted by [Richardson \(2006\)](#) many graduates from doctorates in education take academic positions that include teaching; doctoral students could receive better preparation in teaching, research proposal and management, academic writing, and the scholarship of teaching as well. A focus group needs to examine this issue. Our students have more exposure to the role of teaching-intensive faculty and less exposure to research-intensive faculty.
- The Hispanic students, as a group, have an older average age of 45 compared to 36 in the national survey of doctoral students. Additional information needs to be collected to verify if the population marry young and have families early. By the time students reach 45 years of age, children are grown. More time and resources may be available to fulfil life goals.
- Hispanic students indicated that they were less confident in terms of designing and carrying out a line of research on their own than the national group (National=75%, Hispanic=66%). Students are every bit as capable as doctoral students anywhere else in the world. The numbers indicating less confidence may come from being the first in their families to be involved in a doctoral program and uncertainty or lack of experience and the future is a concern.
- The Hispanic group had much greater community service involvement activities than the national group (National=65%, Hispanic=100%). This reflects the local values of family, community, and culture. People help each other and join together to make sure that family and community are supported. Reaching out to help others is an ongoing part of the community.
- The Hispanic students identified with more faculty more often than the national group (National=30%, Hispanic=35.5%). Students are encouraged early on to start thinking about who will be their committee members and need to get to know their professors.
- [Pauley et al. \(1999\)](#) findings indicate that when the students perceived a highly supportive atmosphere from the faculty, the probability of completing the degree was greater.

## REFERENCES

Castellanos, J. and A.M. Gloria, 2007. Research considerations and theoretical application for best practices in higher education Latina/os achieving success. *Journal of Hispanic Higher Education*, 6(4): 378-396.



- Fiegener, M.K., 2009. Doctorate recipients from U.S. Universities: Summary report 2007-08. Arlington, Virginia: National Science Foundation.
- Golde, C.M. and G.E. Walker, 2006. Envisioning the future of doctoral education: Preparing stewards of the discipline. Stanford: Jossey-Bass.
- Nettles, M.T. and C.M. Millett, 2006. Expanding and cultivating the hispanic STEM doctoral workforce: Research on doctoral student experiences. Journal of Hispanic Higher Education, 5(3): 258-287. DOI <http://doi.org/10.1177/1538192706287916>.
- Pauley, R., M. Cunningham and P. Toth, 1999. Doctoral student attrition and retention: A study of a non-traditional Ed. D. program. Journal of College Student Retention: Research, Theory & Practice, 1(3): 225–238.
- Richardson, V., 2006. Stewards of a field, stewards of an enterprise: The doctorate in education. In Golde, C.M. & Walker, G. E. (Eds.), Envisioning the future of doctoral education: Preparing stewards of the discipline. Stanford: Jossey-Bass.
- Texas Higher Education Coordinating Board, 2004. Doctoral education in texas, part i: Past trends and critical issues pdf file. Available from <http://www.thecb.state.tx.us/>.
- Walker, G.E., C.M. Golde, L. Jones, A.C. Bueschel and P. Hutchings, 2008. The formation of scholars: Rethinking doctoral education for the twenty-first century. San Francisco, CA: Jossey-Bass.

## BIBLIOGRAPHY

- Barker, M.J., 2011. Racial context, currency and connections: Black doctoral student and white advisor perspectives on cross-race advising. Innovations in Education and Teaching International, 48(4): 387-400. DOI <http://doi.org/10.1080/14703297.2011.617092>.
- Carnegie Foundation, 2008. Carnegie foundation survey of doctoral students pdf file: Survey. Available from [http://archive.carnegiefoundation.org/pdfs/tools-sharing/doctorate\\_survey\\_instrument.pdf](http://archive.carnegiefoundation.org/pdfs/tools-sharing/doctorate_survey_instrument.pdf).
- Carspecken, P.F., 1996. Critical ethnography in educational research: A theoretical and practical guide. New York: Routledge.
- Easley, N., M. Bianco and N. Leech, 2012. Ganas: A qualitative study examining Mexican heritage students' motivation to succeed in higher education. Journal of Hispanic Higher Education, 11(2): 164–178.
- Fraenkel, J.R. and N.E. Wallen, 1996. How to design and evaluate research in education. 3rd Edn., New York: McGraw-Hill.
- Krathwohl, D.R., 1993. Methods of educational and social science research: An integrated approach. New York: Longman.
- Patton, M., 1990. Qualitative evaluation and research methods. 2nd Edn., Newbury Park, CA: Sage Publications, Inc.
- U. S. Census Bureau, 2005. American community survey, real people.
- Valverde, M.R. and R.C. Rodriguez, 2002. Increasing Mexican American doctoral degrees: The role of institutions of higher education. Journal of Hispanic Higher Education, 1(1): 51-58. DOI <http://doi.org/10.1177/1538192702001001005>.
- Van Manen, M., 1990. Researching lived experience: Human science for an action sensitive pedagogy. London, Ontario, Canada: State University of New York.

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