

## Hispanics and education II:

October 2013, Vol. 4, No. 2

### Highlights

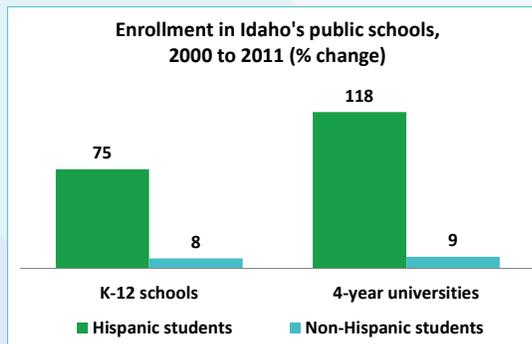
*Economic development and education work hand in hand. Students graduating from Idaho schools will become the skilled employees, entrepreneurs and innovators who help our economy grow . . . Education is the key to higher-paying jobs.*

- Governor C.L. "Butch" Otter (August 15, 2013)<sup>a</sup>

Hispanic students are the fastest growing demographic group in Idaho's education system. The quality of tomorrow's workforce depends on these students succeeding in school.

This report is the second in our series of policy briefs on Hispanics and education in Idaho. Here, we focus on Hispanics' educational aspirations, their decision to attend college, and their experiences with and achievement in science and math (a.k.a. STEM education). Our major findings point to the need for programs and policies that help Hispanic students achieve their highest potential:

- ◆ Hispanic enrollment growth is outpacing non-Hispanic growth in Idaho's public schools, colleges and universities.<sup>b, c</sup>
- ◆ Hispanic students have high aspirations for completing a postsecondary degree. Almost two-thirds expect to complete a 4-year college degree.<sup>d</sup>
- ◆ Despite their aspirations, Hispanic students do not perform as well as non-Hispanics on state achievement tests, *especially in science*.<sup>d</sup>
- ◆ When it comes to experiences with STEM education, Hispanic 7th graders are similar to their non-Hispanic peers. By 10th grade, however, Hispanic students are less likely to have positive experiences.<sup>d</sup>
- ◆ Hispanic parents want to have more time to be involved in their children's education, but many lack confidence in their ability to help with science and math homework.<sup>d</sup>



SOURCE: U.S. Census Bureau<sup>b, c</sup>

### Data sources

The main data source for this report is the University of Idaho's Micron STEM Education Research Initiative, a 5-year study of science, technology, engineering and math education in Idaho ([www.uidaho.edu/research/stem/micronstemed](http://www.uidaho.edu/research/stem/micronstemed)). Here, we highlight results from surveys of 7th and 10th grade students and their parents, and from a general statewide survey. Additional data sources are listed at the end of this report.

For previous issues of our policy brief series on Hispanics, see [www.uidaho.edu/IdahoataGlance](http://www.uidaho.edu/IdahoataGlance).

## Most Hispanic students expect to get a postsecondary degree

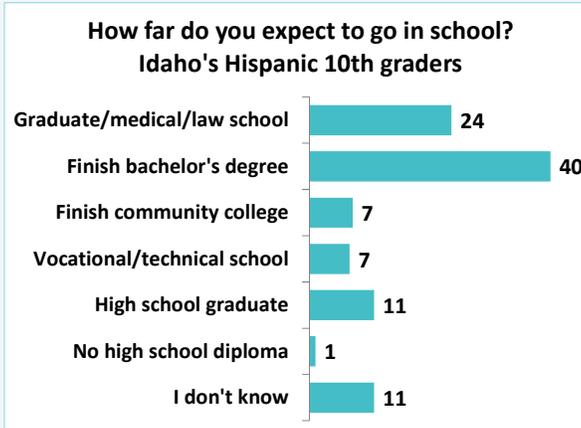
Idaho's Hispanic 10th graders have very high aspirations for educational attainment beyond high school:

- ◆ 64% expect to complete at least a 4-year college degree.
- ◆ Only 1% say they do not plan to finish high school.<sup>d</sup>

For Hispanic students to achieve these aspirations, they need more information about how to apply to and afford college.

- ◆ Fewer than half of Hispanic 10th graders and their parents are confident that they know how to apply for college—only 30% and 49%, respectively—or financial aid—only 25% and 45%, respectively.<sup>d</sup>

Students of all ethnicities also need resources to help them stay in college. Only one of every four students who goes to college completes a degree.<sup>e</sup> Research identifies several reasons: few links between school work and job opportunities, the cost of college, balancing school and work at the same time, and lack of academic readiness.<sup>f, g</sup>



SOURCE: UI Micron STEM Education Research Initiative<sup>d</sup>

## Students consider many things when deciding to go to college

When students think about whether they will attend college, high school grades and scores on college admission exams play a larger role in their decision than the rising cost of college tuition. The most important considerations are: high school grades, scores on college entrance exams, availability of financial aid, and the cost of college. Where differences exist, Hispanic students and parents are more likely to say these factors are “very important” to their college-going decision.<sup>d</sup>

Factors considered "very important" in decision to attend college	Idaho 10th graders			Parents of Idaho 10th graders		
	ALL	Hispanic	Non-Hisp	ALL	Hispanic	Non-Hisp
High school grades	79	75*	80*	77	81*	76*
Scores on college admission exams	78	73*	79*	57	74	55
Availability of financial aid	54	62*	52*	---	---	---
Cost of college	51	67	48	49	63	47
Parents' ability to pay for college	31	44	29	---	---	---
College is close to home	14	23	12	11	34	9

SOURCE: UI Micron STEM Education Research Initiative<sup>d</sup>

\* No statistical difference

Tuition is rising across the nation, making it harder for students to afford college. Almost all parents in Idaho, Hispanic and non-Hispanic alike, include grants and scholarships as part of their plan for paying for college—96% versus 88%, respectively.<sup>d</sup> Unfortunately, state-funded, need-based aid is especially low in Idaho: only \$63 per undergraduate student annually in 2008, compared to \$611 nationally.<sup>h</sup>

Most parents plan to supplement scholarships and grants with other sources. These include student loans (71%), student income from a job while attending college (69%), and parent or guardian investments (60%).<sup>d</sup>

## Why is STEM education important?

STEM occupations are expected to grow faster than other occupations in Idaho. In general, STEM jobs have good benefits and opportunities for career growth. Average wages in Idaho's STEM occupations were roughly twice as high as for all other occupations in 2011. By 2018, 90% of these jobs will require at least some postsecondary education. Thus, a key strategy for increasing access to good paying jobs is to focus on STEM education. <sup>i,j</sup>

## Hispanic students face challenges related to STEM education

While the majority of Idaho's 7th and 10th graders like math (68%) and science (75%), only one-third report it's important to have a job that uses a lot of either one when they become an adult. <sup>d</sup>

When it comes to attitudes about math and science, 7th grade Hispanic students are similar to their non-Hispanic peers. By 10th grade, however, Hispanic students are:

- ◆ less likely to say they like math and science;
- ◆ more likely to say math is harder for them than for other students;
- ◆ less comfortable asking questions in class;
- ◆ less likely to feel they can get extra help in math or science outside of class time; and
- ◆ less likely to feel they can get help with math or science homework at home. <sup>d</sup>

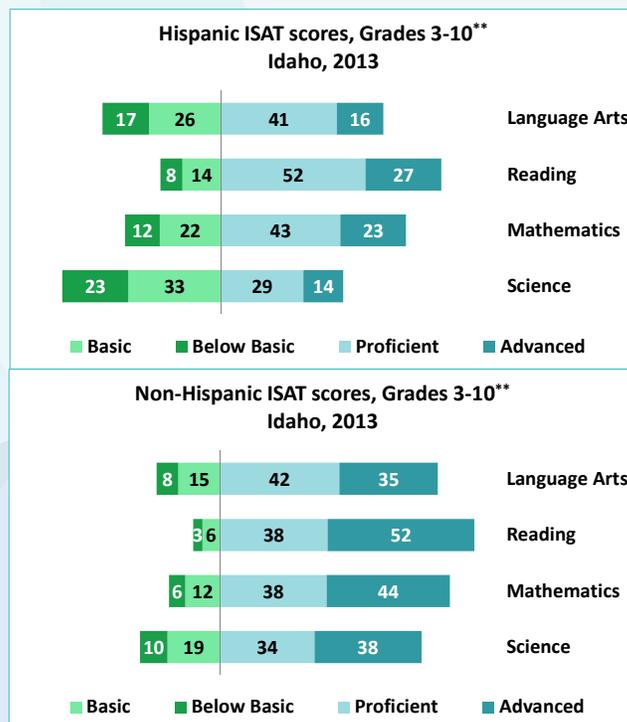
Each year, Idaho's public school students take the Idaho Standards Achievement Test (ISAT). ISAT scores show lower proficiency among Hispanic students in all subjects, *especially science*.

- ◆ Only 43% of Hispanic 5th, 7th and 10th graders are proficient or advanced in science, compared to 72% of non-Hispanics. <sup>\*\*</sup>
- ◆ Only 66% of Hispanic 3rd-10th graders are proficient or advanced in math, compared to 82% of non-Hispanics. <sup>k</sup>

Unfortunately, Hispanic parents feel unprepared to help and feel they do not have the time they need to be involved in their children's education.

- ◆ Hispanic parents are more than twice as likely as non-Hispanic parents to strongly agree that they wish they had more time to be involved in their child's education—48% vs. 19% for parents of 10th graders.
- ◆ However, Hispanic parents are much more likely than non-Hispanic parents to strongly agree that they lack the knowledge to help with math and science homework—51% vs. 26% for math, and 44% vs. 13% for science. <sup>d</sup>

<sup>\*\*</sup> The science ISAT is administered in grades 5, 7 & 10, so science scores apply to students in those grades only.



SOURCE: Idaho State Department of Education <sup>k</sup>

Selected education indicators	IDAHO		
	Hispanic	Non-Hispanic	Total
<b>STUDENT ENROLLMENT</b>			
K-12 public school enrollment: <sup>b</sup>			
2011-2012 (#)	45,810	236,040	281,840
2000-2001 (#)	26,120	218,890	245,010
Change 2000-2011 (%)	75	8	15
College enrollment, public institutions, 4-year and above: <sup>c</sup>			
Fall 2011 (#)	3,230	45,860	49,090
Fall 2000 (#)	1,480	42,180	43,660
Change 2000-2011 (%)	118	9	12
<b>ATTAINMENT</b>			
Highest level of education achieved, 2011 (%): <sup>l</sup>			
Population age 25+			
Graduate or professional degree	3	8	8
Bachelor's degree	6	19	17
Associate's degree	5	9	9
Some college, no degree	17	28	27
High school graduate, GED, or alternative	25	28	28
No high school diploma	45	8	11
Population age 20-24, 2011 (%):			
No high school diploma	27	7	10
High school dropout rates, grades 9-12, public schools (%): <sup>m</sup>			
2009-2010	2.2	1.3	1.4
2004-2005	6.5	2.7	3.0
<b>STUDENT SURVEY RESPONSES</b>			
10th graders reporting they usually get an 'A' (%): <sup>d</sup>			
Math	18	40	37
Science	21	40	37
English	21	47	42
Extremely important to 10th graders' choice of career (%): <sup>d</sup>			
Job earns a lot of money	57	45	47
Job involves physical activity and or working with one's hands	36	26	27
Job does not require science beyond high school	21	12	14

**STEM EDUCATION:** Education in the fields of science, technology, engineering and math.

**HISPANIC:** An ethnicity that refers to those who identify themselves as Spanish, of Hispanic origin, or Latino. Hispanics may be of any race.

**SOURCES:**

- a—Governor C.L. “Butch” Otter, *Education Remains Our Top Economic Priority*, August 15, 2013
- b—Idaho Department of Education, Student Ethnicity Statistics, 2001-02 and 2011-12
- c—National Center for Education Statistics, Integrated Postsecondary Education Data System, 2000 & 2011
- d—University of Idaho, Unpublished data from the Micron STEM Education Research Initiative, 2013
- e—Idaho Business for Education, *Field Guide for Education in Idaho*, 2013
- f—Idaho State Board of Education, *Complete College Idaho: A Plan for Growing Talent to Fuel Innovation and Economic Growth in the Gem State*, 2012
- g—Harvard Graduate School of Education, *Pathways to Prosperity*, 2011
- h—Idaho Legislature, Office of Performance Evaluations, *Reducing Barriers to Postsecondary Education*, 2012
- i—Idaho Department of Labor, Idaho Employment, *Idaho STEM Programs to Enhance Global Competitiveness*, January 2012
- j—Georgetown University, Center on Education and the Workforce, *STEM State Analyses*, Idaho
- k—Idaho State Board of Education, ISAT Results, 2013
- l—U.S. Census Bureau, American Community Survey, 2011 1-Year Estimates and 2006-2010 5-Year Estimates
- m—National Center for Education Statistics, Elementary / Secondary Information System, 2004-05 & 2009-10

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