

PROLOGUE

In order for Austin College to position itself optimally to recruit, retain and educate future students it is necessary for the institution to have a clear sense of who these students are. Consequently, this report highlights changes in the potential college-bound population with attention to national, state and institutional data when available. We chose four main areas to target: 1) demographic shifts, 2) changes in the financial landscape, 3) unique student populations, and 4) shifts in secondary school curricula. We have dedicated separate sections of this report to each topic. However, we first provide summaries of these sections and then questions to foster discussion and further analysis regarding future steps for the College.

Demographic Shift Summary Points

- Texas is one of a few states projected to experience overall population growth including growth in the childhood population over the next decade and beyond. Most of this growth within the state is as a result of an increase within the Latino population, particularly Latino children. Latinos have historically lagged behind other ethnic groups in educational attainment and earning potential.
- Austin College has experienced significant growth within our population of Latino and Black students in both the applicant pool and the enrolled student body.

Financial Landscape Summary Points

- The economic recession and uncertainty has put financial strain upon our prospective families. This strain has been felt within all ethnic groups, but perhaps is more acute within Latino and Black populations.
- Growth within populations that are historically more apt to experience suppressed levels of educational attainment and earning potential will make the College more reliant upon need-based aid, perhaps even after a full recovery from the recession.

Unique Student Populations Summary Points

- The number of students requesting accommodations has increased dramatically from 2001 to 2013 at AC. Current students have a wider array of diagnoses than past students. The most common diagnoses are ADHD, learning disabilities and psychological conditions. The diagnoses that have increased the most since 2002 are ADHD, psychological conditions and chronic physical conditions.
- The foreign-born population is growing in Texas faster than in the US in general. This growth is particularly pronounced in metropolitan areas from which AC often recruits students. Many people in Texas over the age of five are proficient in another language. The most common language is Spanish. Some Spanish-speakers may not be proficient in English. Texas is second only to California in its share of the limited-English-proficient population. If these people are the parents of our future students, it may shape their openness to higher education generally and liberal arts colleges specifically as well as their ability to pay for a private college education.
- First-generation college students often are motivated by ties to community and family while U.S. colleges and universities typically promote independence and self-promotion. Thus, there is often a mismatch of values. These students may lack cultural capital about the norms and expectations of colleges.
- A rigorous high school curriculum may eliminate several negative outcomes that first-generation college students experience in college.

- Programs that are intentional, local, college-wide and comprehensive effectively foster academic, social and cultural integration of first-generation college students and consequently promote their retention and success.

Secondary School Curricula Summary Points

- The new high school graduation requirements of HB 5 ideally will not affect AC because college-bound students will still take rigorous courses. In addition, choice in Endorsements may give students a better sense of majors that suit them. However, the reduction in prescribed courses may make it more difficult to discern a student's exact preparation.
- Increasing numbers of students in Texas are taking dual enrollment, AP and IB courses. People often view IB as comparable to AP, when IB is a full curriculum. Because there are more requirements, students may avoid it. However, its international focus may align well with the AC mission and diverse student body. Perhaps there are ways to incentivize students' participation in the IB curriculum as well as AP and dual enrollment.
- Project-based learning is slowly growing despite people's lack of information or misinformation about it. It is more likely to exist in wealthier districts. However, there are positive outcomes for low SES students and underrepresented students of color as PBL encourages student engagement with practical problems.

Questions for Future Consideration

1. If our primary market (Texas) will only become more ethnically, economically and linguistically diverse, how can we best serve the needs of this growing population? Does Austin College hold an advantageous position in regards to its attractiveness to students of color? Are there disadvantages that could be addressed? Are we aligning our message of return on investment and outcomes to messages relevant to students of color?
2. Given that the population of first-generation college students will continue to grow in Texas, are there ways in which our messaging and marketing are off-putting to them? Is Austin College offering services that fit the needs of these students? If first-generation college students are more likely to drop out, what are ways the College can aid their academic, social and cultural integration as well as their greater financial need?
3. Can we create a mechanism for tracking the parental educational backgrounds of our students? Do we track our success in retaining and graduating students by ethnicity? Do we track student debt levels by ethnicity? Is there any institutional mechanism for tracking the language diversity in our student body and their families? Are we taking full advantage of the language diversity of our students?
4. Does the College have the sufficient infrastructure (in terms of staffing, office space, etc.) adequately to serve the growing numbers of students needing accommodations for a disability? Do faculty and staff beyond the Academic Skills Center have sufficient training specific to their job descriptions regarding ways to serve these students?
5. What are ways to incentivize the completion of dual enrollment, AP courses and the IB curriculum for high school students who enroll at AC? Are there potential connections between programs in the Center for Global Learning and International Baccalaureate?

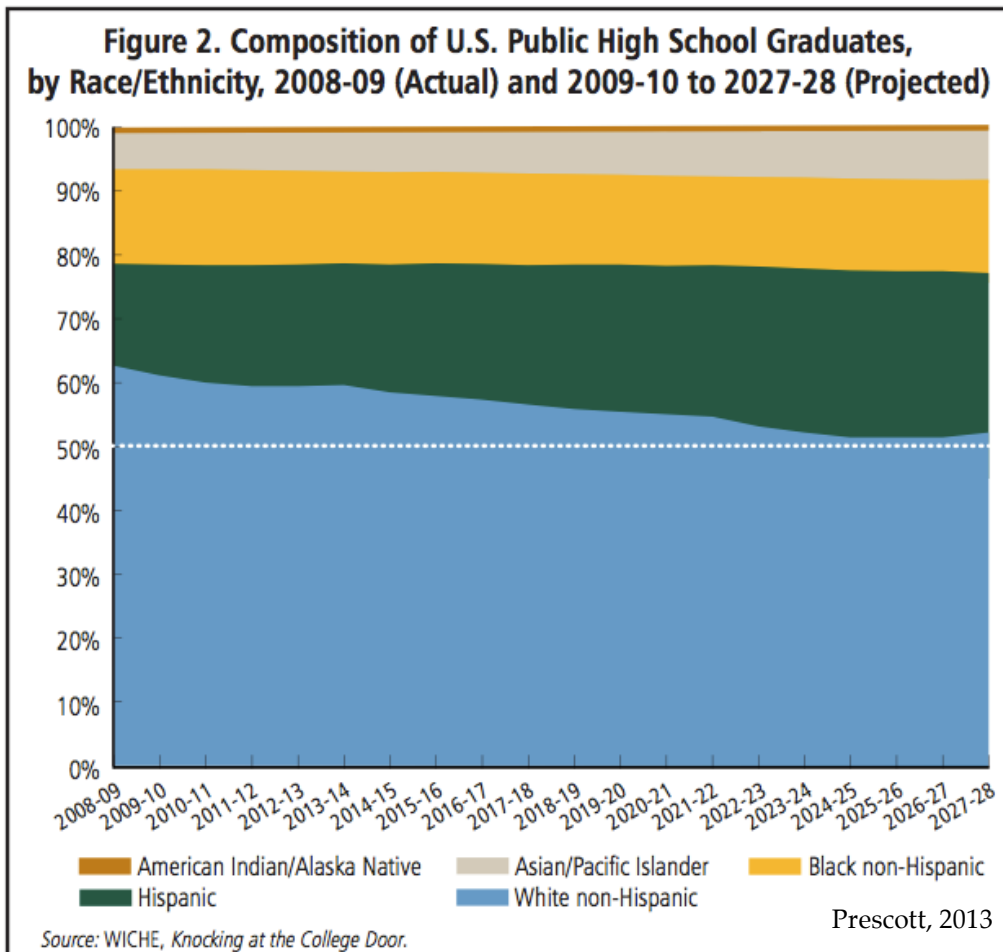
6. Are there connections between high impact practices in higher education and project-based learning in secondary education? If so, what are ways to communicate this synergy to prospective students and to work with high schools with project-based learning programs?
7. Given that today's students are digital natives, are there ways to harness prospective students' familiarity with technology for pedagogical purposes (e.g., in digital humanities, computer science, media studies, etc.)?

I. DEMOGRAPHIC SHIFTS

This section of the report details ways in which population shifts in the US generally and in Texas more specifically will impact Austin College’s “standard operating procedures” for recruiting and retaining students. These shifts include changes in the ethnic, educational and economic profiles of the total population and traditional college-age population.

1) National Shifts in High School Graduates

According to the Western Interstate Commission for Higher Education report, *Knocking at the College Door 2013*, the nation’s population of high school graduates peaked with the 2011 graduating class. The 3.409 million graduates in 2011 served as the apex of a 17-year period of continuous growth in this population – the average annual growth was roughly 2.2%. The national population of high school graduates is projected to decrease 5.6% by the 2014 graduating class before essentially plateauing, with small gains, for a decade. The national population of high school graduates is projected to reach 2011 levels again in 2025. The rebound in population will be led by a small number of states and will largely come from growth in Latino¹ populations within those states. In effect, the change in the population of high school seniors over the next decade will be more dramatic than in any other decade in recent history.



2) Ethnic Shifts at the National and State Levels

The national population (total) grew by over 27 million between the 2000 census and 2010 census. Just over 45% of that growth came from five states – Texas, California, Florida, Arizona, and Nevada (listed in order of largest gross growth). Texas alone contributed nearly 16% of the nation’s population growth during the last decade. According to data derived from the U.S. Bureau of the Census, from 2000 to 2009, Texas saw 54% of its population increase come from natural increases (in-state births), 21.6% from net domestic migration, and 24.4% from international migration.

The population growth in natural increases and international migration has been paced primarily by growth in the Latino population. As seen in the table below just over 65% of the statewide population growth of 4,293,741 between 2000 and 2010 came from growth in the Latino population.

Population, Population Change, and Proportion of the Total Population by Race/Ethnicity for the State of Texas, 2000 and 2010

Race Ethnicity	2000		2010		Change		Percent of Population	
	Numeric	Percent	Numeric	Percent	Numeric	Percent	2000	2010
NH White (Anglo)	10,933,313	52.4	11,397,345	45.3	464,032	4.2	52.4	45.3
Hispanic	6,669,666	32.0	9,460,921	37.6	2,791,255	41.8	32.0	37.6
NH Black	2,364,255	11.3	2,886,825	11.5	522,570	22.1	11.3	11.5
NH American Indian	68,859	0.3	80,586	0.3	11,727	17.0	0.3	0.3
NH Asian	554,445	2.7	948,426	3.8	393,981	71.1	2.7	3.8
NH Hawaiian/Pacific Islr.	10,757	0.1	17,920	0.1	7,163	66.6	0.1	0.1
NH Some Other Race	19,958	0.1	33,980	0.1	14,022	70.3	0.1	0.1
NH Two or More Races	230,567	1.1	319,558	1.3	88,991	38.6	1.1	1.3
Total	20,851,820	100.0	25,145,561	100.0	4,293,741	20.6	100.0	100.0

Source: U.S. Census 2010, P.L. 94-171.

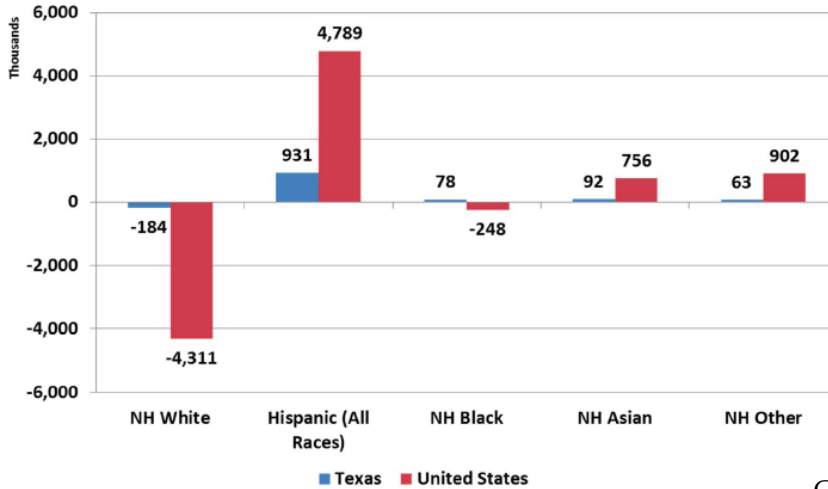
*Hispanic includes Hispanic persons of all races. All other race/ethnicity categories shown here are non-Hispanic (non-Hispanic White[Anglo], non-Hispanic Black, non-Hispanic American Indian, non-Hispanic Asian, non-Hispanic Hawaiian/Pacific Islander, non-Hispanic Some Other Race, non-Hispanic Two or More Races).

Cline, 2012a

While the national population of high school graduates has begun a period of decline, Texas has seen an increase of nearly 1 million in the population of those under 18 years of age between 2000 and 2010. All ethnic groups tracked (Asian, Black, Latino, White, and non-Latino other) experienced population increases except for Whites, which experienced a *decline* of 184,486 (7.4%) between 2000 and 2010. By comparison, Latinos realized a *growth* of 931,012 (39%). This demographic shift, particularly in the childhood population, is consistent with national trends as well. The growth in the overall Latino population is projected to continue. The 2010 census showed that the percentage of the statewide population represented by Whites fell below 50% for the first time since shifts have been tracked by ethnic group as seen in the figure below. By 2040, Whites are

projected to make up 25% of the state's population, while Latinos are projected to make up nearly 60% of the state's population.

Numeric Change in Population by Race/Ethnicity for Texas and the United States (Childhood Population), 2000 - 2010



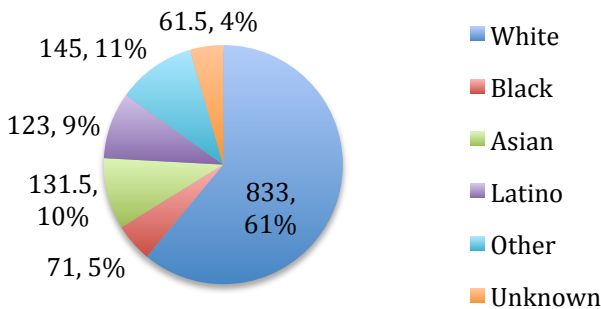
Cline, 2012b



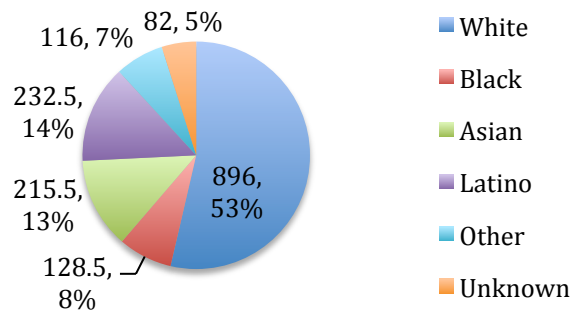
3) Ethnic Shifts at Austin College

While not exactly congruent with the statewide demographic trends, Austin College has seen demographic shifts in our applicant pool and in the makeup of our student body. To normalize our own data, we averaged the data from the 2003 and 2004 entering cohorts and compared them with averaged data from our 2009 and 2010 entering cohorts. Each ethnic group (Asian, Black, Latino, White, other and unknown) within the applicant pool grew between the 2003/2004 cohort and the 2009/2010 cohort, except for other. Growth in applicant pool for White students was a modest 7.5%, while growth from students of the other known ethnicities (Asian, Black, and Latino) were all well over 60%, with growth among Latinos at 89%.

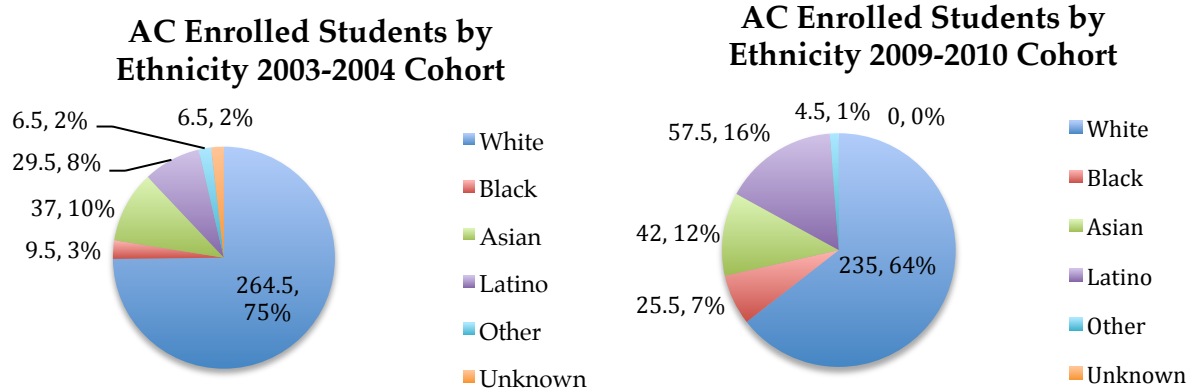
AC Applications by Ethnicity
2003-2004 Cohort



AC Applications by Ethnicity
2009-2010 Cohort



The ethnic makeup of our enrolled students has also seen significant shifts. Enrollment numbers have increased nearly 168% for Black students, nearly 95% for Latino students, and 13.5% for Asian students. During the same point in time, the number of enrolled White students has decreased 11.5%. The charts below demonstrate that the student body Austin College has shifted from 25% to 36% students of color. And while the data has not been normalized for the 2013 entering class, that class is projected to consist of over 40% students of color – a first for the College.



4) Consequences of these Demographic Shifts

According to data derived from the US Census American Community Survey 2010, the Latino population aged 25 years and older lags behind its Asian, Black and White counterparts in educational attainment. The discrepancies in educational attainment are wider within the state of Texas. According to a recent report from TG Research and Analytical Services, *The State of Student Aid and Higher Education in Texas, 2013*, 40% of Latinos age 25 and older in Texas lack a high school degree (Barone, Creusere, Fletcher, & Neal, 2013). By comparison, those percentages are 14% for Black adults and 8% for White adults.

Due to changes in the available data from our applications for admission, the comparable institutional data is not reliable enough to offer an assessment on our own population. One of the recommended actions is that the College establish an internal mechanism to collect reliable data regarding the parental educational background of its students. Still, given the rather large lag in the educational attainment within the adult Latino population within the state, a reasonable deduction could be made that the College is seeing more first-generation college students² in its application pools and in its enrolled student bodies. This phenomenon potentially has and will affect the way in which we speak to students and families, teach students, and provide needed services for these students.

According to the National Center for Education Statistics report, *Higher Education: Gaps in Access and Persistence Study, 2012* (Ross et al., 2012), students from lower socioeconomic backgrounds and students with parents who did not attend college – not mutually exclusive factors – were less likely to enroll in college. Those who did enroll were less likely to persist in college. Black and Latino students also had retention risks.

According to state projections, as the Latino population becomes a majority in Texas, the educational attainment of the future workforce will shift dramatically. By 2040 it is projected that 30% of the state's workforce will not have a high school degree. By comparison, that percentage was 19% in the year 2000. Conversely, only 17% of the workforce in the state will have a bachelor's degree or higher in 2040, compared to nearly 24% in the year 2000. As a result, the median household income in the state is expected to fall from \$54,441 in 2000, to \$50,903 (in 2000 dollars) in 2020, and \$47,883 (in 2000 dollars) in 2040 (Cline, 2012b).

Summary Points

- Texas is one of a few states projected to experience overall population growth including growth in the childhood population over the next decade and beyond.
- Most of this growth within the state is as a result of an increase within the Latino population, particularly Latino children.
- Latinos have historically lagged behind other ethnic groups in educational attainment and earning potential.
- Austin College has experienced significant growth within our population of Latino and Black students in both the applicant pool and the enrolled student body.

Footnotes

¹ Throughout this document we use the term *Latino* rather than *Hispanic*. The former term harkens to a geographical place, Latin America, and the mixing of cultures there, while the latter term harkens to Spain and Spanish culture alone. The U.S. Census chose to use Hispanic in 1980 because they received a complaint that Latino sounded too similar to Ladino (Herbst, 1997). Tables and graphs from other sources tend to use the Census terminology, Hispanic.

² Our use of *first-generation college student* should not be confused with first-generation immigrant. We further discuss first-generation college students later in this document.

References

- Barone, S., Creusere, M., Fletcher, C. & Neal, M. (2013). *The state of student aid and higher Education in Texas, 2013*. <http://www.tgslc.org/pdf/sosa.pdf>
- Cline, M.E. (2012a). *Demographic change in Houston, Texas and the United States*. Hobby Center for the Study of Texas – Rice University. <http://hobbycenter.rice.edu/workarea/downloadasset.aspx?id=2147484170>
- Cline, M.E. (2012b). *Demographic change in Texas, Implications for education and economic development*. Hobby Center for the Study of Texas – Rice University. <http://hobbycenter.rice.edu/workarea/downloadasset.aspx?id=2147484253>
- Herbst, P.H. (1997). *The color of words: An encyclopædic dictionary of ethnic bias in the United States*. Yarmouth, ME: Intercultural Press, Inc.
- Prescott, B. (2013) Demography as destiny: Policy considerations in enrollment management. *WICHE – Policy Insights*, April 2013, <http://www.wiche.edu/info/publications/PI-knocking2013.pdf>
- Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher education: Gaps in access and persistence study* (NCES 2012-046). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office. <http://nces.ed.gov/pubs2012/2012046/chapter1.asp>

Additional Sources

- The College Board (2012). *Higher education landscape* <http://www.collegeboard.com/highered/res/res.html>
- Texas Higher Education Coordinating Board, *State of higher education in Texas 2012*. <http://www.thecb.state.tx.us/download.cfm?downloadfile=56B2E543-92CA-267C-917F4BD95543DF67&typename=dmFile&fieldname=filename>

II. FINANCIAL LANDSCAPE

This section of the report highlights ways in which the financial landscape of prospective students has changed. While the previous section detailed the increase in prospective students of lower socioeconomic status, this section details ways in which even among families of average socioeconomic status (i.e., the typical AC family), finances are constrained.

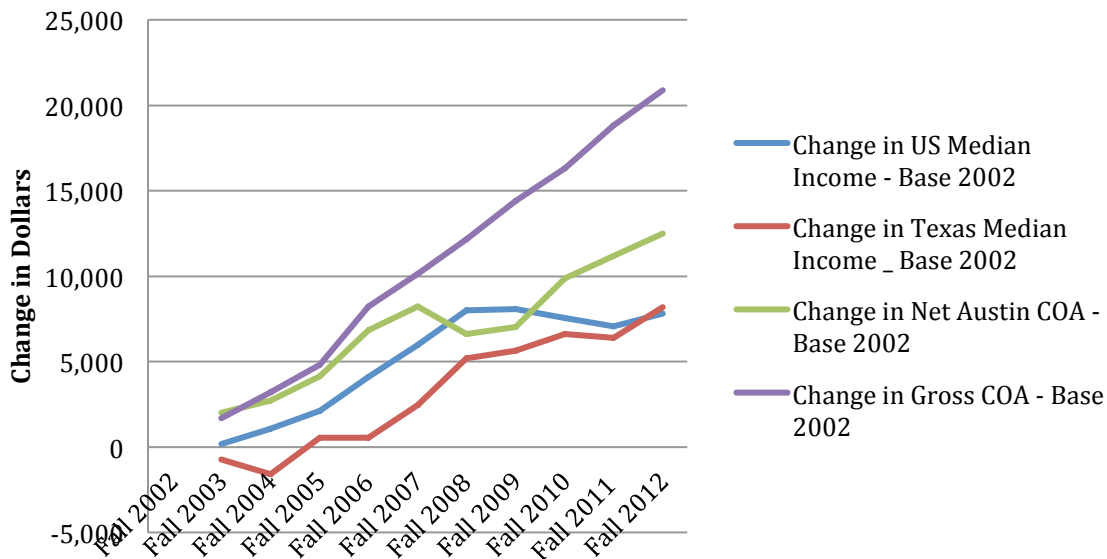
1) Effects of the Economic Recession on Higher Education

The recent economic recession and subsequent slow recovery have put strains on families' ability and willingness to pay for higher education. This strain has been felt particularly strongly at small private colleges. A recent column in *The Chronicle of Higher Education* conveyed the results of a study that found that more than 80% of colleges and universities with enrollment of less than 4,000 students saw their enrollments decrease in 2011-2012, despite the fact that many of those colleges increased their discount rates (Kelderman, 2013). The primary reason given for these decreases at nearly half of the schools that experienced enrollment drops was the *price sensitivity of prospective families*.

2) The Growing Gap between Income and the Cost to Attend College

A quick comparison of median state and national incomes and Austin College's gross and net comprehensive cost of attendance demonstrates the strain being felt by prospective families. The chart below reveals that both our gross cost of attendance and our net cost of attendance (cost after tuition discounting) have increased more rapidly than the annual increase in state and national median incomes. The gap in costs and incomes has grown most dramatically since 2009, even though the rate of growth in our costs has decreased. Median incomes have been relatively flat at the state and national levels during this period, while college costs have continued to increase. According to US Census the federal and state median family incomes increased 18.5% and 20%, respectively, between 2002 and 2012. During that same period, the gross comprehensive cost of attendance for Austin College and the net comprehensive cost of attendance for Austin College increased by 83% and 77.5%, respectively. The inequity in income growth and rising costs has become even more apparent to families in the wake of the recent recession. The federal median income has remained flat since 2008, while the median family income in Texas has grown 5.5%. Since 2008, our gross and net comprehensive costs of attendance have increased by 26% and 23%, respectively. The College has given careful consideration to minimizing tuition increases while infusing more money into financial aid programs. Still, these modest increases to cost have been magnified by little to no growth in income.

Change (in Dollars) of AC Net and Gross Cost of Attendance (COA) Compared to Change in Median State and Nation Family Incomes



It is appropriate to consider the effects of the growing gap between family incomes and both net and gross costs, as the effects of a significant imbalance will be felt at different points. An imbalance between gross cost and income may affect demand for the school in the form of fewer qualified applications. And while this prospect has yet to be experienced at Austin College, it puts us in danger of losing our value position. Private colleges and universities have certainly felt the scrutiny of prospective families as they consider the costs and weigh less expensive alternatives. This trend has led to students applying to more colleges – an assertion supported by the fact that a majority of colleges and universities have reported annual increases in applications while still experiencing declines in enrollment (Pérez-Peña, 2013). The gap between income and net cost is most felt in declining yield of admitted students – that is, families review their financial aid packages and still deem the college too expensive.

This collective phenomenon might best be summarized by an example as it pertains to an individual family. Focusing on the rising gap between the published (gross) costs of a college and their relative income, the parents of a high school senior may encourage the student to apply to more options. Already, the doubt of their ability to pay has an effect on our ability to yield that student; instead of applying to three schools, this student now applies to six schools, several of which have lower published costs than Austin College. Despite increased tuition discounting in the form of aid provided with institutional grants and scholarship, it is still not enough to offset the stagnant income and cuts to state aid programs. As the gaps between costs and income increase, this scenario becomes the norm for many more prospective families.

3) Demographics and Finances

One of the most universally used metrics with which to analyze the socioeconomic diversity of the College’s student body is to identify the percentage of Pell-eligible students within the student body. Federal Pell grants are awarded on a sliding scale relative to a family’s Expected Family Contribution (EFC). For reference, the EFC

associated with Pell eligibility correlates with a total family adjusted gross income of \$50,000 or less. While not exactly congruent with national and state trends, Austin College can still be viewed as a microcosm of these broader populations. As the face of the student population changes, particularly in Texas, our college population will change. And, just as the socioeconomic landscape of the state changes, so will the socioeconomic landscape change in our student body.

In 2006, 16% of Austin College students qualified for a federal Pell grant. In 2012, nearly 28% of our students qualified for Pell grants. In 2012, 31% of our Pell eligible students were White, 31% were Latino, 20% were Asian, 12% were Black, and 6% had other or unknown ethnicities. Comparatively, in 2006, 41% of our Pell students were White, 24% were Latino, 17% were Asian, 9% were Black, and 9% had unknown or other ethnicities. This phenomenon does not appear to be just a temporary challenge based solely upon the recent recession and subdued recovery. While those factors have certainly exacerbated the financial strain on prospective and enrolled students and families, the state's demographic shift and potential polarization of educational attainment and income may offset the economic gains that might be felt in the future. In effect, the Pell eligibility detailed above may become our new norm.

Summary Points

- The economic recession and uncertainty has put financial strain upon our prospective families. This strain has been felt within all ethnic groups, but perhaps is more acute within Latino and Black populations.
- Growth within populations that are historically more apt to experience suppressed levels of educational attainment and earning potential will make the College more reliant upon need-based aid, perhaps even after a full recovery from the recession.

Acknowledgements

We are grateful to Stephen Clayton '06, Barbara Sylvester, Amanda Kisselle '04, and Eristeo Perez '13 for assisting in the research for the first two sections of the report.

References

Kelderman, E. (2013). Small private colleges lose more students despite rise in discounting. *The Chronicle of Higher Education*. <http://chronicle.com/article/Small-Private-Colleges-Lose/139091/>

Pérez-Peña, R. (2013). College enrollment falls as economy recovers. *New York Times*.

http://www.nytimes.com/2013/07/26/education/in-a-recovering-economy-a-decline-in-college-enrollment.html?_r=0

U.S. Census. (n.d.) *State median income* <http://www.census.gov/hhes/www/income/data/statemedian/>

Additional Sources

Baum, S. & Ma, J. (2012). *Trends in college pricing 2012*. College Board.

<http://trends.collegeboard.org/college-pricing>

Cline, M.E. (2012). *Demographic change in Texas, Implications for education and economic development*. Hobby Center for the Study of Texas – Rice University.

<http://hobbycenter.rice.edu/workarea/downloadasset.aspx?id=2147484253>

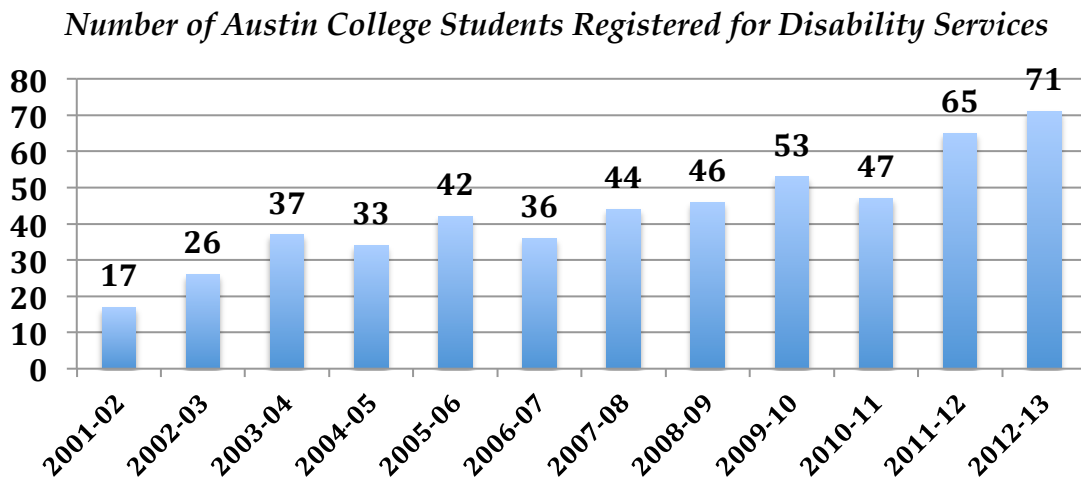
III. UNIQUE STUDENT POPULATIONS

Previous sections of this report have detailed changes in demographics of students likely to apply to Austin College and also shifts in the financial terrain that these students navigate. The following section highlights some characteristics of students that may at times serve as assets and at other times serve as challenges in the context of higher education – both in terms of a student's progress and the institution's ability to

serve him or her. These characteristics include: 1) disabilities requiring accommodations, 2) proficiency in languages other than English, and 3) first-generation college student status.

1) Students with Disabilities and Accommodations for These Students

According to the U.S. Department of Education, National Center for Education Statistics (2009), in 2008 10.8% of postsecondary students had a disability. The 2010 percentage of AC students was 3.7. As can be seen in the figure below from data from the Austin College Academic Skills Center (ASC), since 2001 the number of students registered for disability services at AC has increased dramatically. This increase is consistent with national increases in students with disabilities in higher education institutions (Marklein, 2011; Raue & Lewis, 2011).



Nationally, a variety of diagnoses are represented among students on campuses. Table 4 from a report by Raue and Lewis (2011) reveals the percentages of diagnoses overall and by different types of higher education institutions.

Table 4. Percentage distribution of disabilities reported by 2-year and 4-year degree-granting postsecondary institutions that enrolled students with disabilities, by disability category and institutional characteristics: 2008–09

Institutional characteristic	Difficulty hearing ¹	Difficulty seeing ²	Difficulty speaking or language impairment	Mobility limitation/orthopedic impairment	Traumatic brain injury	Specific learning disabilities	ADD or ADHD ³	Autism Spectrum Disorders ⁴	Cognitive difficulties or intellectual disability	Health impairment/condition, including chronic conditions	Mental illness/psychological or psychiatric condition ⁵	Other
All institutions	4	3	1	7	2	31	18	2	3	11	15	3
Institutional type												
Public 2-year	4	3	1	8	3	31	13	2	5	10	15	5
Private not-for-profit 2-year	4 ¹	4	2	4	3	28	13	5 ¹	16 ¹	9	11	2 ¹
Private for-profit 2-year	2	1	1	8	1	46	13 ¹	1 ¹	8 ¹	5	11	2 ¹
Public 4-year	3	3	1	7	2	29	23	2	1	11	16	3
Private not-for-profit 4-year	3	2	1	3	1	36	26	2	1	11	13	2
Private for-profit 4-year	4	2	1	4	2	29	22	4	8	9	14	1 ¹
Size of institution												
Less than 3,000	3	2	1	5	2	36	22	2	3	10	13	2
3,000 to 9,999	3	3	1	7	2	33	17	2	3	11	15	3
10,000 or more	4	3	1	8	3	29	18	2	3	10	16	4

¹ Interpret data with caution; the coefficient of variation is greater than 50 percent.
² Difficulty hearing includes deaf and hard of hearing.
³ Difficulty seeing includes blindness or visual impairment that cannot be corrected by wearing glasses or contact lenses.
⁴ ADD or ADHD stands for Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder respectively.
⁵ Autism Spectrum Disorders includes Asperger Syndrome.
⁶ Mental illness/psychological or psychiatric condition includes depression, anxiety, and Post-Traumatic Stress Disorder (PTSD).
 NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. Enrollments provided by institutions were unduplicated (each student with a disability was counted only once regardless of the number of disabilities he or she has), duplicated (students with multiple disabilities were counted multiple times), or another type of count (e.g., counts in which students with disabilities were counted for each semester that they were enrolled during the 2008–09 12-month academic year). The percentage distribution of disabilities reported by the institutions was computed by dividing the number of enrollments in a particular disability category by the sum of the number of enrollments in all the disability categories. Data are for the 12-month 2008–09 academic year. Detail may not sum to totals because of rounding.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System (PEQIS), "Students With Disabilities at Postsecondary Education Institutions," 2009.

In Table 4 above, one can see that nationally the most heavily represented categories are learning disabilities, ADHD and psychological conditions. (Similar findings are also presented in Marklein, 2011.) The pattern at AC is similar as can be seen in the table below provided by the ASC.

Number of Austin College Students Registering for Accommodations 2010-2011		Categories Among Students with Disabilities					
All Students	All Disabilities	ADD	Psychological	Learning Disability	Autism	Chronic/Physical	Neurological
1285	47	23	15	11	6	5	3

Note that 16 of the 47 students reported diagnoses in multiple categories.

A *New York Times* article by Schwarz and Cohen (2013) reported that 11% of children in the US are diagnosed with ADHD. "The figures showed that an estimated 6.4 million children ages 4 through 17 had received an A.D.H.D. diagnosis at some point in their lives, a 16 percent increase since 2007 and a 41 percent rise in the past decade." Moreover, while the numbers of college students in the US with serious mental health issues remained relatively constant from the 1950s through the 1980s, the numbers have increased since then (Kitzrow, 2003).

Similar increases occurred among the AC students requiring accommodations as well. As seen in the tables below, from 2002 to 2013, there were increases particularly in attention deficit disorder, psychological issues and chronic physical conditions.

Number of AC Students Registering for Accommodations Reported Diagnoses						
2002-2003						
ALL DISABILITIES	Attention Deficit Disorder	Psychological	Learning Disability	Autism	Chronic/ Physical	Neurological
26*	11	5	24	1	0	2

*All Disabilities = 9/26 students reported multiple diagnoses in 1 or more categories

2003-2004						
ALL DISABILITIES	Attention Deficit Disorder	Psychological	Learning Disability	Autism	Chronic/ Physical	Neurological
37*	11	4	24	1	8	3

*All Disabilities = 7/37 students reported multiple diagnoses in 1 or more categories

2004-2005						
ALL DISABILITIES	Attention Deficit Disorder	Psychological	Learning Disability	Autism	Chronic/ Physical	Neurological
33*	12	4	23	0	7	4

*All Disabilities = 10/33 students reported multiple diagnoses in 1 or more categories

2010-2011						
ALL DISABILITIES	Attention Deficit Disorder	Psychological	Learning Disability	Autism	Chronic/ Physical	Neurological
47*	23	15	11	6	5	3

*All Disabilities = 16/47 students reported multiple diagnoses in 1 or more categories

2011-2012						
ALL DISABILITIES	Attention Deficit Disorder	Psychological	Learning Disability	Autism	Chronic/ Physical	Neurological
65*	36	24	27	6	13	5

*All Disabilities = 27/65 students reported multiple diagnoses in 1 or more categories

2012-2013						
ALL DISABILITIES	Attention Deficit Disorder	Psychological	Learning Disability	Autism	Chronic/ Physical	Neurological
71*	39	15	31	9	21	5

*All Disabilities = 31/71 students reported multiple diagnoses in 1 or more categories

While the number of AC students reporting disabilities has increased since 2001, the number of diagnoses reported has increased as well as can be seen from the lists below. Diagnoses are listed in order of prevalence. Note that diagnoses represented at both time periods are in red font.

<i>2002-2003 Reported Diagnoses at AC</i>	<i>2012-2013 Reported Diagnoses at AC</i>
AD/HD	Attention Deficit/Hyperactivity Disorder
Dyslexia	Anxiety Disorder
Disorder of Written Expression	Dyslexia/Reading Disorder
Reading Disorder	Autism Spectrum Disorder
Math Disability	Dysgraphia/Writing Disorder
Auditory Processing Disorder	Learning Disorder-not otherwise specified
Anxiety Disorder	Bipolar Disorder/Mood Disorder
Traumatic Brain Injury	Brain Trauma; Frontal Temporal Lobe Dys.
Depression	Depression/Dysthymia
Asperger's Syndrome	Diabetes-type 1
	Math Disorder
	Migraines
	Amnesic Disorder (verbal memory only)
	Language Process./Express/Recept/Disorder
	Auditory Processing/Listening Comp. Disorder
	Cognitive Disorder-not otherwise specified
	Distal Spinal Muscular Atrophy
	Mitochondrial Disorder
	Sensory Integration Disorder
	Crohn's Disease
	Hearing Disorder
	Predominant Psychomotor Disturbance NOS
	Sleep Disorder
	Bone Disease
	Reflex Neurovascular Dystrophy
	Cerebral Palsy
	Visual Impairment
	Eosinophilia Syndrome

Consistent with the lists above, more than 90% of the students registered for accommodations at AC have "hidden disabilities" (e.g., ADHD, chronic health condition, learning disability, or psychological disorder).

The ASC provides a variety of general services: tutoring, group reviews, study skill and time management assistance, learning styles assessment, and workshops on academic skills building.

The ASC provides the following services for students with diverse abilities: accommodations and auxiliary aids (e.g., extending test time, note-sharing, assistive technology, housing modification) and support services – time management, organization skill coaching, study skills preparation and self-advocacy training.

At many high schools absences are a form of disability accommodation. Thus, a student may come to AC with the expectation that he/she may miss class as part of his/her accommodations. However, absences are not a form of accommodation at AC.

Data from the ASC reveals that in 2011-12 there were 4,100 total combined visits to the ASC to use its services. These visits include director consults (360), tutorials (1,029), study (707), tests with accommodations (405), C/I students in tours (353), athletes (303), and workshops (943).

Some students needing accommodations may come from high schools that have prepared them with skills for addressing the rigors of college (e.g., pre-emptively contacting the ASC, acting as their own advocates, being clear and realistic about the accommodations they need). However, most students have not had the privilege of this previous mentoring and socialization. Consequently, this latter group places a great demand upon the staff of the ASC. Anecdotal reports suggest that for this group, their high school experience was not academically challenging and thus their disability often did not factor into their academic performance. Their first encounter with a rigorous curriculum is at AC. Their lack of experience in navigating such terrain means that their lack of both study skills and coping skills need to be addressed by the ASC staff.

Summary Points

- The number of students requesting accommodations has increased dramatically from 2001 to 2013 at AC.
- Current students have a wider array of diagnoses than past students.
- The most common diagnoses are ADHD, learning disabilities and psychological conditions.
- The diagnoses that have increased the most since 2002 are ADHD, psychological conditions and chronic physical conditions.

Acknowledgements

We are grateful to Laura Márquez-Ramsey, Director of the Academic Skills Center, and Kate Boessen, Coordinator of Academic Support Services, for providing Austin College data and information relevant to this section of the report.

References

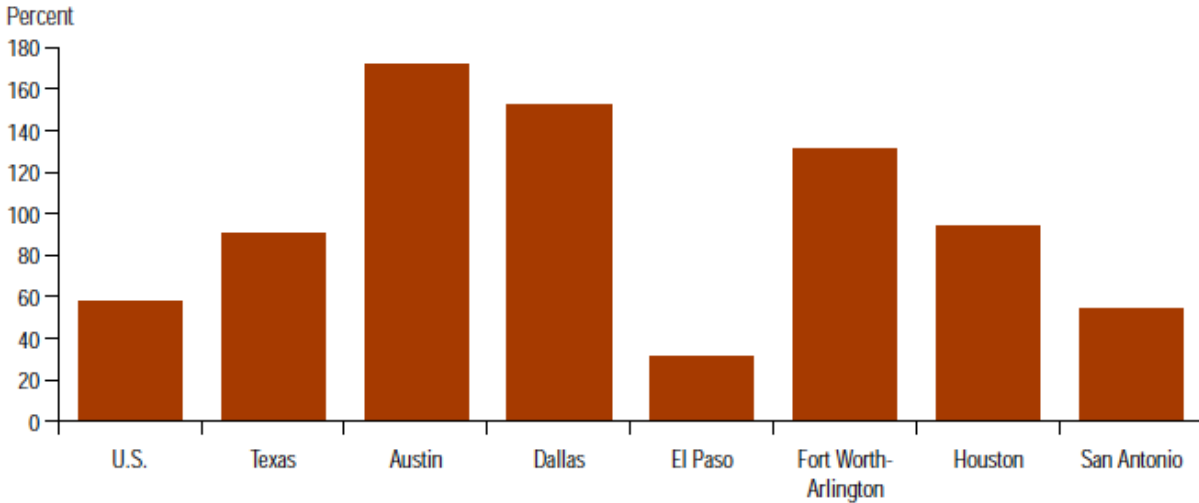
- Fast facts: Students with disabilities*. National Center for Education Statistics. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=60>
- Kitzrow, M.A. (2003). The mental health needs of today's college students: Challenges and recommendation. *NASPA Journal*, 17(4), 165-179.
- Marklein, M.B. (2011, October 18). Learning-disabled students get firmer grip on college. *USA Today*, <http://usatoday30.usatoday.com/news/education/story/2011-10-17/college-and-learning-disabilities/50807620/1>
- Raue, K., & Lewis, L. (2011). *Students with disabilities at degree-granting postsecondary institutions (NCES 2011-018)*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Schwarz, A., & Cohen, S. (2013). A.D.H.D. seen in 11% of U.S. children as diagnoses rise. *New York Times*: http://www.nytimes.com/2013/04/01/health/more-diagnoses-of-hyperactivity-causing-concern.html?pagewanted=all&_r=1&

2) Proficiency in Languages other than English

As mentioned in the first section of this report, the ethnic composition of Texas is changing dramatically. A related shift is in the number of people who were born outside of the US. This growth in foreign-born people suggests that more students applying to college will be bilingual or multilingual. The increase in the foreign-born population has been faster in Texas than in the US. In addition, this escalation has been more pronounced in metropolitan areas than in rural, border areas (Petersen & Assanie,

2005).

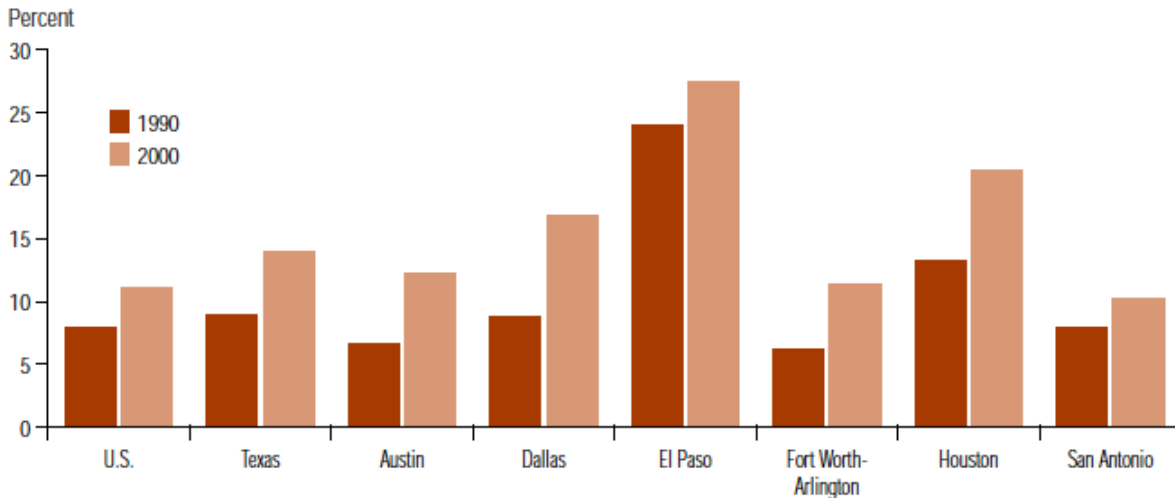
Chart 2
Growth of Foreign-Born, 1990–2000



SOURCE: Texas State Data Center.

Specifically, this growth in foreign-born population is pronounced in areas (e.g., DFW, Houston, Austin) from which AC traditionally recruits students.

Chart 3
Share of the Foreign-Born



SOURCE: Census Bureau.

Consistent with these shifts in nativity, there is a large portion of Texans who are proficient in a language other than English. More than 30% of people in Texas speak a language other than English at home (Shin & Kominski, 2010). In addition, more than 22% of people in Texas speak Spanish. The next most common non-English language is Vietnamese at more than 1% of people in Texas. Finally, Siebans and Julian (2011) report that speakers of North American native languages are not common in Texas, although they are relatively common in the nearby states of New Mexico and Arizona.

While some Texans may be proficient in multiple languages, Texas has one of the highest percentages of limited English proficiency residents among US states. Note that “The term Limited English Proficient (LEP) refers to any person age 5 and older who reported speaking English ‘less than very well,’ as classified by the US Census Bureau” (Pandya, Batalova, & McHugh, 2011, p. 12). These six states’ populations made up 68% of the national LEP 2010 population of 25.2 million people - 9% of people over age 5 in the US.

Table 1. Top States for Number and Share of LEP Residents, 2010

Rank	State	LEP Population (thousands)	Share of Total US LEP Population (percent)
1	California	6,898	27.3
2	Texas	3,359	13.3
3	New York	2,458	9.7
4	Florida	2,112	8.4
5	Illinois	1,158	4.6
6	New Jersey	1,031	4.1

Source: Authors’ tabulations from Census Bureau 2010 ACS, Table B16001, “Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over,” available through American FactFinder at <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

Of metropolitan areas in the US in 2009, the Houston-Sugar Land-Baytown area had one of the top ten LEP populations in the country with 936,000 people. Spanish was the most common language of this population (82.1%). Other languages spoken among them in descending order were Vietnamese, Chinese, Urdu and Arabic. AC does not track native language proficiency statistics; however, many of our students do come from families in which they speak languages other than English. Language diversity on the AC campus would be consistent with the perceptions of 58% of student affairs administrators at four-year colleges who in 2008 reported increases in language diversity on their campuses (Levine & Dean, 2012).

Summary Points

- The foreign-born population is growing in Texas faster than in the US in general. This growth is particularly pronounced in metropolitan areas from which AC often recruits students.
- Many people in Texas over the age of five are proficient in another language. The most common language is Spanish.
- Some Spanish-speakers may not be proficient in English. Texas is second only to California in its share of the Limited English Proficient population. If these people are the parents of our future students, it may shape their openness to higher education generally and liberal arts colleges specifically as well as their ability to pay for a private college education.

References

- Levine, A., & Dean, D.R. (2012). *Generation on a tightrope: A portrait of today’s college student* (3rd ed.). San Francisco: Jossey-Bass.
- Pandya, C., Batalova, J., & McHugh, M. (2011). *Limited English proficient individuals in the United States: Number, share, growth, and linguistic diversity*. Washington, DC: Migration Policy Institute. www.migrationinformation.org/integration/LEPdatabrief.pdf

Petersen, D. & Assanie, L. (2005). *The changing face of Texas: Population projections and implications*. Federal Reserve Bank of Dallas.

http://www.dallasfed.org/assets/documents/research/pubs/fotexas/fotexas_petersen.pdf

Shin, Hyon B. & Kominski, R.A. (2010). *Language use in the United States: 2007*, American Community Survey Reports, ACS-12. U.S. Census Bureau, Washington, DC. www.census.gov/prod/2010pubs/acs-12.pdf

Siebans, J., & Julian, T. (2011). *Native North American languages spoken at home in the United States and Puerto Rico: 2006–2010*. ACSBR/10-10. www.census.gov/prod/2011pubs/acsbr10-10.pdf

3) First-Generation College Students

As mentioned in the first section of this report, there are likely more first-generation college students both applying to and enrolling in AC than in the past. This pattern is consistent with national trends in which numbers of first-generation students are increasingly enrolling in college (Ward, Siegel & Davenport, 2012). Relative to continuing-generation students, they often are more collectivist in their values and goals, and thus, there is a mismatch between their culture and the individualistic culture typical of higher education in the US (Stephens, Fryberg, Markus, Johnson & Covarrubias, 2012). Moreover, this mismatch is a factor in the achievement gap between first-generation and continuing-generation students (Stephens et al., 2012).

In addition to this mismatch in values, first-generation college students may lack the cultural capital that continuing-generation students typically have (Ward et al., 2012). Ward and colleagues define first-generation college students as students whose parents have no experience attending college. These students may not know what office hours are, how to address faculty, how often to come to class, how many hours they should study, when and where to ask for assistance, the potential negative effects of working a job many hours per week, and the value of being involved on campus. In addition, their parents may express some ambivalence about their attendance in college – not understanding the benefit of living on campus, the time requirements of studying or the value of higher education. Nationwide, 60% of first-generation college students drop out before graduating (Ward et al., 2012). These issues may be exacerbated when the students are both first-generation and low-income. Low-income first-generation college students are particularly sensitive to financial pressures and student loan debt (Ward et al., 2012). They receive roughly the same financial aid as other students although they have more need (Engle, Bermeo & O'Brien, 2006). Ironically, while first-generation college students may have more factors pulling them away from participating in college life (e.g., working many hours, commuting, family responsibilities), they are more likely to benefit from engagement in academic activities (Ward et al., 2012).

Warburton, Bugarin and Nuñez (2001) analyzed data from the Beginning Postsecondary Students Longitudinal Study and found that relative to continuing-generation college students, first-generation college students were more likely to have only taken the basic curriculum in high school and less likely to have taken the most rigorous curriculum (e.g., AP or four years of math). During their first year of college, first-generation college students had a lower GPA (2.6) relative to continuing-generation college students (2.8). The former group (21%) was also more likely than the latter group (10%) to have taken at least one remedial course during the first year of college. However, first-generation college students who had taken the most rigorous high school curriculum did not show these deficits. Once in college, first-generation college students were less likely than continuing-generation college students to attend

continuously and to attain a degree. However, again, these differences were eliminated when the former group had taken a rigorous high school curriculum. Finally, first-generation college students were less likely than continuing-generation college students to remain at their initial four-year institution or transfer to a comparable four-year institution. These effects were present even among first-generation college students who had taken rigorous high school curricula. Ironically, first-generation college students often believe that they are academically prepared for college when in fact they are not (Paul, 2012).

Lynch (2013) reports that in 2010 the Department of Education found that first-generation college students make up 50% of all college students in the US. He also reported data from the National Center for Education Statistics from 2010 that revealed that first-generation college status was overrepresented among students of color while underrepresented among White students as seen in the table below.

Percentage of U.S. College Students who are First-Generation College Students by Ethnic Group

Latino	Black	Native American	Asian	White
48.5	45	35	32	28

Engle, Bermeo and O’Brien (2006) analyzed data from the U.S. Department of Education’s 2004 National Postsecondary Student Aid Study. They compared first-generation college students to students whose parents have earned a bachelor’s degree or higher in Texas. First-generation college students in Texas are more likely to...

- be **female** (57 vs. 52 percent)
- come from **minority backgrounds** (59 vs. 37 percent)
- come from **lower-income families** (mean income \$45,000 vs. \$83,000)
- have **parents born outside the U.S.** (34 vs. 22 percent)
- be **non-native English speakers** (24 vs. 10 percent)
- be **married** (31 vs. 19 percent), **have children** (35 vs. 17 percent), and be **single parents** (19 vs. 9 percent)
- be **financially independent** from their parents (62 vs. 42 percent)
- be **older** (average age 28 vs. 24)
- have **earned a GED** (9 vs. 4 percent)
- **delay entry** into postsecondary education after completing high school (49 vs. 30 percent)
- attend college **closer to home** (average distance 80 vs. 163 miles)
- **live off-campus** (94 vs. 83 percent)
- need **remediation** (49 vs. 33 percent)
- attend **part-time** (49 vs. 36 percent)
- **work full-time** while enrolled (40 vs. 31 percent)
- **not receive financial help from family** to pay for college (83 vs. 61 percent)

The AC entering classes of 2011 and 2012 respectively have 20% and 21% students for whom neither parent has a four-year degree. Ward and colleagues (2012) provide several recommendations for institutions to better serve these students. First, first-generation college students benefit in terms of retention and success from academic integration (e.g., discussing coursework outside of class with faculty and students), social integration (i.e., having a sense of belonging at the institution), and cultural integration (i.e., understanding the campus culture). Second, colleges that create programs that are intentional and multifaceted, and include all divisions of the institution have the best positive outcomes for these students. Third, an institution should avoid one-size-fits-all programs and create a program that is specific to its campus, its campus culture and its students. Fourth, one-and-done orientation programs are typically not as effective as programs that are integrated into the larger

first-year student orientation program. Fifth, similar to the way colleges use predictive modeling to forecast who is likely to enroll, colleges should use predictive modeling to foresee persistence among first-generation college students. Then, a student who is particularly at risk may receive intervention (e.g., a peer mentor) before a crisis arises.

Summary Points

- First-generation college students often are motivated by ties to community and family while U.S. colleges and universities typically promote independence and self-promotion. Thus, there is often a mismatch of values.
- These students may lack cultural capital about the norms and expectations of colleges.
- A rigorous high school curriculum may eliminate several negative outcomes that first-generation college students experience in college.
- Programs that are intentional, local, college-wide and comprehensive effectively foster academic, social and cultural integration of first-generation college students and consequently promote their retention and success.

References

- Engle, J., Bermeo, A. & O'Brien, C. (2006). *Straight from the source: What works for first-generation college students*. Washington, DC: The Pell Institute for the Study of Opportunity in Higher Education.
- Lynch, M. (2012). *It's tough to trailblaze: Challenges of first-generation college students*. <http://diverseeducation.com/article/50898/>
- Paul, A. (2012, April 4). What we can learn from first-generation college students. *Time*. Retrieved from <http://ideas.time.com/2012/04/11/what-we-can-learn-from-first-generation-college-students/>
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, 102, 1178-1197.
- Warburton, E.C., Bugarin, R. & Nuñez, A. (2001). *Bridging the gap: Academic preparation and postsecondary success of first-generation students*, NCES 2001-153, Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Ward, L., Siegel, M.J., & Davenport, Z. (2012). *First-generation college students: Understanding and improving the experience from recruitment to commencement*. San Francisco: Jossey-Bass.

IV. SECONDARY SCHOOL CURRICULA

The final section of this report addresses the types of curricula incoming students may have experienced. During the summer of 2013 the Texas State Legislature eliminated the law mandating that all high school students in Texas fulfill graduation requirements commonly known as the 4 x 4. Students now have to take four English courses, three Math courses, three Social Studies courses and three Science courses; the 4 x 4 required four classes in each of these areas. HB 5 also eliminated the Minimum, Recommended and Advanced designations on high school transcripts and replaced them with Foundation and Distinguished designations. The Distinguished designation includes the Foundation requirements plus a fourth math course including Algebra 2, a fourth science course and an Endorsement (Texas Education Agency, 2013). Endorsements include concentrations in 1) arts and humanities, 2) business and industry, 3) multidisciplinary studies, 4) public services and 5) science, technology, engineering and mathematics (STEM) (Weiss, 2013). While the Endorsements are designed to provide both flexibility in elective courses and rigor in coursework, it remains unclear whether

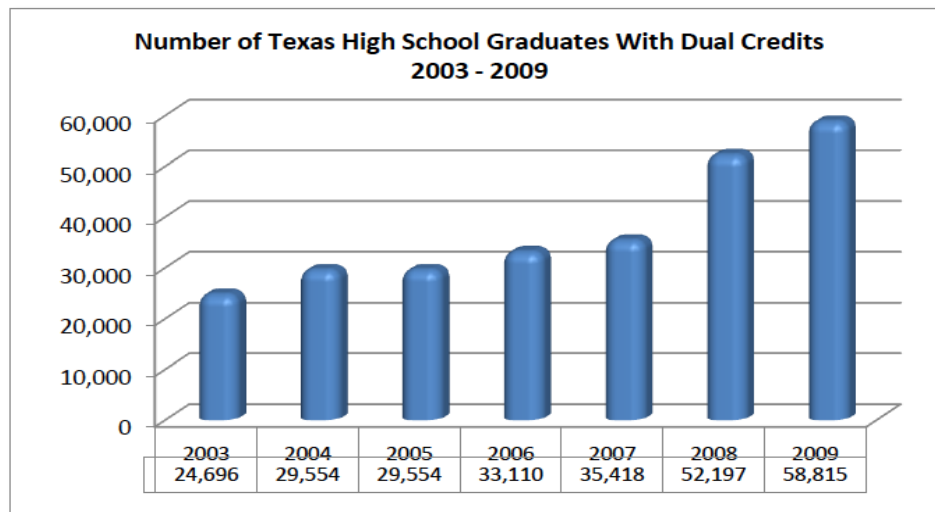
this rigor will be balanced across all subjects or only in the focus of the Endorsement. It also remains unclear whether multiple courses may count for the same requirement (i.e., could either statistics or calculus count for the same math requirement). These curricular changes are scheduled to go into effect the fall of 2014. Ideally, college-bound students will know to take the Distinguished curriculum, and thus the legislation may not affect the pool of students likely to apply to AC. However, it remains unclear what courses will fulfill requirements, and thus, the legislation may put increased pressure on the Admissions staff to scrutinize every transcript to ensure that applicants have taken appropriate courses.

Many high schools expose their students to challenging and innovative curricula beyond the basic graduation requirements. Specifically, we highlight dual enrollment, Advanced Placement, International Baccalaureate and project-based learning. While average SAT and ACT scores of high school graduates in Texas between 2003 and 2009 have remained stable, participation increased in dual enrollment, Advanced Placement and International Baccalaureate over the same period of time (Texas Higher Education Coordinating Board, n.d.).

1) Dual Enrollment

Dual Enrollment is a program in which a high school student may earn both high school credit and college credit for the same course. Often a student will take these courses at a community college, although some high schools partner with community colleges to have the courses taught onsite. As displayed in the figure below, there were increases in the number of graduates from Texas high schools who earned dual enrollment credits.

- The number of students earning dual credit while enrolled in high school increased by 138 percent from 2003 to 2009.



Texas Higher Education Coordinating Board. (n.d.)

2) Advanced Placement

Advanced Placement consists of an array of intensive courses that high schools across the US and Texas may offer. At the end of the course, the student takes an exam and receives credit based upon his/her score on the exam. The range of scores is 1-5, and a passing score is 3. Students who matriculate at AC may receive college course credit for a score of 4 or 5 on an exam. As seen in the table below, in Texas the number of students taking AP exams and the total number of exams taken increased steadily from 1999 to 2010. However, the percentage of exams with passing scores has decreased in that same time.

Table 8
Advanced Placement (AP) Examination Trends, Texas and the United States, 1999-00 Through 2009-10

Year	Examinees		Examinations		Examinations with scores of 3-5		Scores in 3-5 range (%)	
	Texas	U.S.	Texas	U.S.	Texas	U.S.	Texas	U.S.
1999-00	60,405	747,922	107,640	1,242,324	58,964	790,810	54.8	63.6
2000-01	69,569	820,880	125,785	1,380,146	64,157	845,933	51.0	61.3
2001-02	80,240	913,251	144,060	1,548,999	76,802	977,760	53.3	63.1
2002-03	90,880	998,329	164,804	1,705,207	85,545	1,048,510	51.9	61.5
2003-04	101,115	1,081,102	183,130	1,852,700	93,321	1,138,455	51.0	61.4
2004-05	112,263	1,197,439	204,403	2,065,045	99,428	1,225,845	48.6	59.4
2005-06	122,969	1,312,523	224,168	2,266,038	108,824	1,345,521	48.5	59.4
2006-07	135,130	1,432,169	246,096	2,476,962	116,809	1,460,806	47.5	59.0
2007-08	147,241	1,546,020	270,466	2,674,296	125,779	1,534,686	46.5	57.4
2008-09	158,993	1,653,962	287,756	2,860,912	138,276	1,672,594	48.1	58.5
2009-10	179,320	1,802,144	325,571	3,134,686	153,539	1,802,472	47.2	57.5

Source. College Board and Educational Testing Service (2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010).

Note. Data are based on public and nonpublic school examinees.

Texas Education Agency (2011)

3) International Baccalaureate

Many people often believe that Advanced Placement and International Baccalaureate are equivalent programs. However, **International Baccalaureate** is a comprehensive curriculum, not just individual courses. Students take intensive classes that have an international theme within this larger curriculum. Students have more requirements relative to AP, and thus it may not be as prevalent. However, it is recognized internationally while AP is not. At the end of the course, the student takes an exam and receives credit based upon her/his score on the exam. The range of scores is 1-7, and a passing score is a 4. Students who matriculate at AC may receive college course credit for a score of 5, 6 or 7 on an exam. As seen in the table below, the number of students in Texas taking the IB exam has increased from 1999 to 2010. While the percentage of students passing the exam has remained flat, the number of exams with passing scores seems to have declined (Texas Education Agency, 2011).

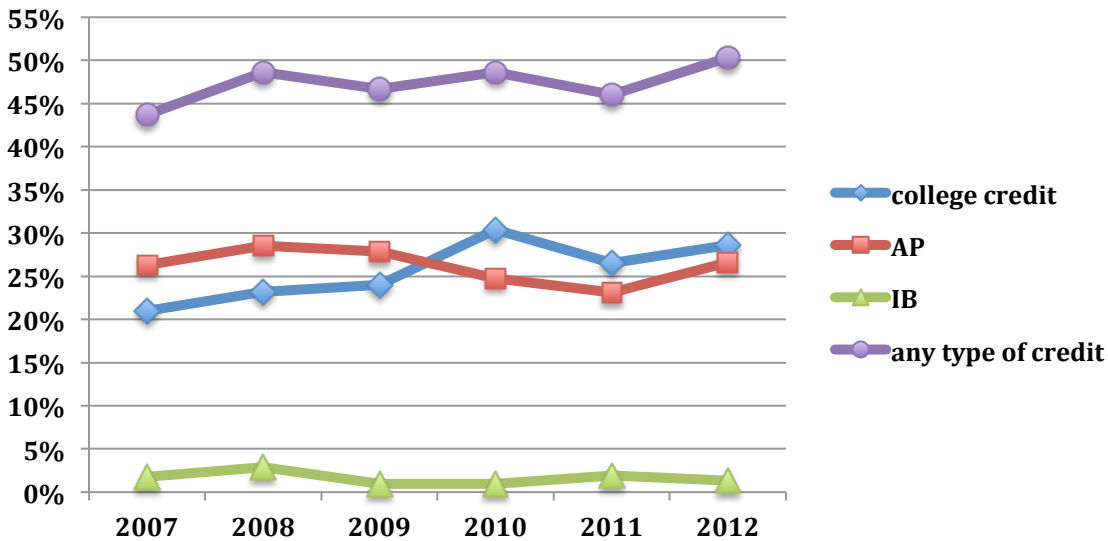
**International Baccalaureate Examination Participation & Performance,
Grades 11-12, Texas Public Schools**

<i>Academic Year</i>	<i>Number of Examinees</i>	<i>Participation Rate</i>	<i>Percent of Examinees scoring 4-7 on examinations</i>	<i>Percent of Examinations with scores of 4-7</i>
1999-00	843	0.2	86.0	79.1
2000-01	895	0.2	85.4	81.9
2001-02	1,233	0.3	85.1	78.9
2002-03	1,340	0.3	87.8	79.7
2003-04	1,388	0.3	88.6	78.6
2004-05	1,487	0.3	85.6	77.1
2005-06	1,753	0.4	86.9	77.6
2006-07	1,975	0.4	85.1	76.6
2007-08	2,202	0.4	86.8	76.1
2008-09	2,364	0.5	87.1	75.2
2009-10	2,805	0.5	87.9	76.5

Data from Table A-6 from Texas Education Agency (2011)

Among students matriculating at Austin College, there has been an increase in those arriving with credits of any type: from 43.7% in 2007 to 50.3% in 2012 – half of the incoming class. However, this increase was primarily in college credits like dual enrollment. As seen in the table below, among high school students coming to Austin College from 2007 through 2012, there was an upward trend in the percentage of each incoming class arriving with college credit. However, the percentages arriving with AP credit or IB credit remained relatively stable over that time period.

Percentage of Austin College Incoming Students Arriving with Credits



Despite these increases, it should be kept in mind that it is most common for students to enter with zero credits. This finding was as true in 2012 as it was in 2007. Moreover, of the students who had credits, the average number of credits did not change much

between 2007 (3.2) and 2012 (3.6).

4) Project-Based Learning

In addition to these well-established programs, there are recent innovations in high school curricula. One is project-based learning. **Project-based learning** attempts to teach students both critical thinking and applied skills focused on a project that integrates courses across disciplines. It involves solution of a practical problem, student initiative, an end product, work over time such as a semester or academic year, and teachers as advisors (Helle, Tynjälä & Olkinuora, 2006). These characteristics overlap some of the high-impact educational practices (e.g., learning communities, collaborative assignments and projects, and service learning / community-based learning) discussed over the past year on the AC campus. Reviews and meta-analyses have found these types of pedagogical approaches to be effective (Thomas, 2000; Walker & Leary, 2009).

Regarding the implementation of project-based learning in area schools, Brian Seay from Plano ISD commented,

Some districts are starting to expand into programs that integrate skills and content into more applied and real-world contexts through programs. These programs are growing in popularity among the business community, and most education reformers love the idea of project-based learning. However, there are some major obstacles to these being adapted on the large scale. One is cost, because the technology infrastructure investment is high. Many administrators are concerned, incorrectly, that these programs will force schools to de-emphasize important accountable content, causing students to be underprepared for state assessments. Many teachers and communities are skeptical of the new models.

Some districts have begun to integrate these programs in limited contexts, e.g., one school or an area within a school. These programs have had a great deal of success in preparing students especially those of lower SES and underrepresented groups. One of the major reasons for this is the higher amount of student engagement the real-world context provides. While these programs are growing slowly, they will continue to do so at a greater pace once the success can be documented and the goals and ideas of the process can be better articulated.

One of the biggest obstacles to these programs is the idea that they do not emphasize what admissions looks for (test scores, GPA, AP courses, etc.). The more colleges that adopt and communicate more holistic admissions policies, the easier it will be for communities to embrace other paths to college.

There is not yet much research on project-based learning curricula in Texas. Perhaps the applied nature of these programs may be a way to harness students' familiarity with technology for pedagogical purposes. Moreover, it may align with their experiential expectations about school and learning. However, these curricula are not currently noted on students' transcripts, so there is no official way to know whether a student has a project-based learning background.

Summary Points

- The new high school graduation requirements of HB 5 ideally will not affect AC because college bound students will still take rigorous courses. In addition, choice in Endorsements may give students a better sense of majors that suit them. However, the reduction in prescribed courses may make it more difficult to discern a student's exact preparation.
- Increasing numbers of students in Texas are taking dual enrollment, AP and IB courses.
- People often view IB as comparable to AP, when IB is a full curriculum. Because there are more requirements, students may avoid it. However, its international focus may align well with the AC mission and diverse student body. Perhaps there are ways to incentivize students' participation in the IB curriculum as well as AP and dual enrollment.
- Project-based learning is slowly growing despite people's lack of information or misinformation about it. It is more likely to exist in wealthier districts. However, there are positive outcomes for low SES students and underrepresented students of color as PBL encourages student engagement with practical problems.

Acknowledgements

We are indebted to Gail Gentry, Coordinator of Research and Reporting, for providing data regarding AP, IB and college credits of incoming students at AC. We are also grateful to Brian Seay for providing information relevant to this section of the report. He is a former teacher of the year for Clark High School in Plano ISD and is part of a team developing a Plano ISD campus focused on project-based learning.

References

- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education – theory, practice and rubber sling shots. *Higher Education*, 51(2), 287-314. doi:10.1007/s10734-004-6386-5
- Texas Education Agency. (2011). *Advanced Placement and International Baccalaureate examination results in Texas, 2009-10* (Document No. GE11 601 07). Austin, TX: Author.
www.tea.state.tx.us/acctres/AP_IB_2009-10.pdf
- Texas Education Agency. (2013). *83rd Texas legislative session briefing book on public education legislation*. Austin, TX: Author. <http://www.tea.state.tx.us/legislative-reports/83briefingbook.aspx>
- Texas Higher Education Coordinating Board. (n.d.). *Changes in the demographic characteristics of Texas high school graduates 2003-2009*.
<http://www.theccb.state.tx.us/reports/PDF/2454.PDF?CFID=41257584&CFTOKEN=91006830>
- Thomas, J.W. (2000). *A review of research on project-based learning*.
http://www.ri.net/middletown/mef/linksresources/documents/researchreviewPBL_070226.pdf
- Walker, A., & Leary, H. (2009). A problem based learning meta analysis: Differences across problem types, implementation types, disciplines, and assessment levels. *Interdisciplinary Journal of Problem-based Learning*, 3(1). Available at: <http://dx.doi.org/10.7771/1541-5015.1061>
- Weiss, J. (August 3, 2013). Legislature's changes to Texas education go far beyond zapping of 10 STAAR tests. *Dallas Morning News*. <http://www.dallasnews.com/news/education/headlines/20130803-legislature-s-changes-to-texas-education-go-far-beyond-zapping-of-10-staar-tests.ece>

GENERAL COHORT CHARACTERISTICS

In closing, we would like to offer a snapshot of the cohort of students currently in and soon to arrive on college campuses. We gleaned these characteristics from Levine and Dean's (2012) book, *Generation on a tightrope: A portrait of today's college student*.

Who are Today's College Students? They...

- are digital natives
- are exposed to a wide sea of superficial information

- live in 24/7 world
- have been coddled and protected
- often act entitled and are accustomed to affirmation
- confuse the quantity of work with the quality of work
- like to follow instructions and not rock the boat
- do not understand rules around plagiarism given the ease of access to information and their experience with collaborative learning
- are not very engaged in campus life
- are sexually active but not romantically committed
- are interpersonally and socially unskilled particularly in face-to-face interactions
- do not have a sense of the line between public and private in digital media
- have parents who are heavily involved
- consider their parents heroes and admire them more than public figures
- have mental health issues and use counseling services on campuses
- use disability services
- have a consumerist approach to education
- are familiar with and have had contact with people of other ethnicities
- have ethnic divides on campus that sometimes become worse because of their lack of knowledge of the historical context
- are open to interethnic, interfaith and LGBT dating and socializing
- lack engagement in politics
- have politics that are issue-driven rather than ideologically driven
- are disillusioned by most institutions in the US and want change
- are very pragmatic having grown up during a global recession
- have a global view of issues although they are not always knowledgeable
- receive news from multiple outlets and may consume that content alone
- engage in issues at the local level where they feel they can make a difference
- engage in service (although with “safe” issues and agendas like children and older people)
- do not commit many hours per week to service due to needing to focus on pragmatic things like work for pay
- are not particularly religious
- are not hopeful for the future of the US, but are hopeful for their personal futures

“Digital natives are being taught by digital immigrants in analog universities” (Levine & Dean, 2012, p. 49).

Reference

Levine, A., & Dean, D.R. (2012). *Generation on a tightrope: A portrait of today's college student* (3rd ed.). San Francisco: Jossey-Bass.

Prologue Committee members were Stephen Clayton '06, Amanda Kisselle '04, Laura Márquez-Ramsey, Brian Seay, and Barbara Sylvester, and the co-chairs and primary authors of this report were Lisa M. Brown and Matthew Krov '02.