

# Epilogue: What Do Our Students Do After Graduation and How Are We Preparing Them for the Future?



## *Epilogue Study Group*

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**July 31, 2013**

## Executive Summary

### Where they land

Austin College prepares students well for rewarding careers or post-graduate educational opportunities, setting them on the path to full, engaged, and meaningful lives. About 38% join the workforce, about 40% enter graduate or professional school, and the remainder participates in prestigious fellowships, certification programs, or other résumé-building activities. The high percentage of our students who go on to graduate or professional school distinguishes us from most institutions in the region. We have an excellent track record in preparing students for graduate programs in law, teaching, and the allied health sciences (Public Health, Physical Therapy, Occupational Therapy, Dentistry, DO, MD, and Chiropractic), among many other fields. Of the students who seek employment, about half of them go to work in a business-related field.



### The skills they need

Both employers and graduate and professional schools seek applicants with many of the same skills. They want critical thinkers with outstanding written and oral communication skills, problem solvers with experience in the real world, tech-savvy leaders who are globally aware and locally involved. They value the ability to work as part of a team but also the capacity to lead, to create, and to innovate. The Austin College curriculum and co-curriculum provides abundant opportunities for students to develop and hone these skills.

### Next steps

An Austin College education is personal, academically rigorous, and well-rounded. Students have both the academic breadth and depth to be ready for a demanding career or graduate program. Our students are particularly adept at making connections between disciplines and formulating original insights. Our graduates are second-to-none in their real-world experiences both abroad and in local community involvement. Extraordinary faculty mentoring permits our students to develop their potential to the fullest.

There are, however, areas where we can build on existing strengths. We can make our expectations for excellence in written and oral communication clearer and more consistent. We can provide better support for faculty and students to keep updated about digital learning and teaching. We can enhance our already strong undergraduate research program. We can make job applicants from Austin College even more distinctive by encouraging them to acquire the certifications and workplace skills appropriate to their field. We can help students present both curricular and co-curricular transferable skills in order to help them reach their goals even in a tough economic climate. We can make our pre-professional advising even more robust, adding a pre-Business adviser. Finally, we can do an even better job of spreading the word about the extraordinary value of an Austin College liberal arts education.

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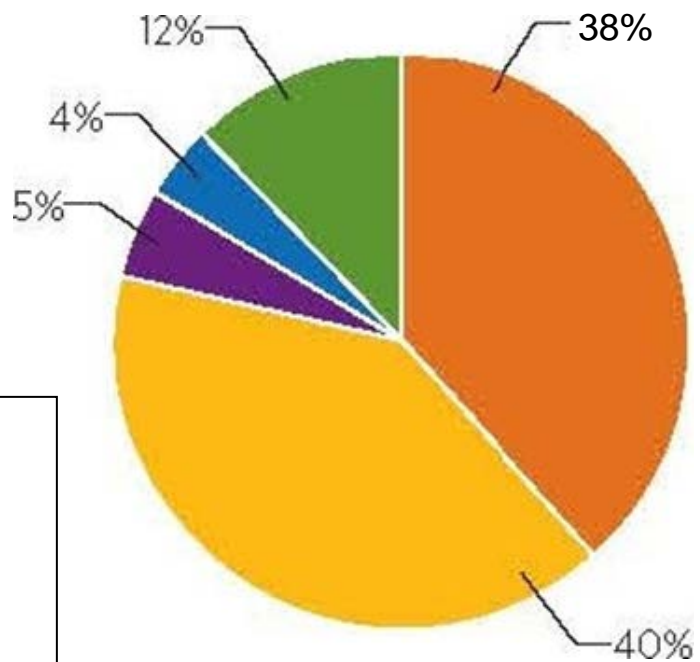
## I. Post-Graduate Paths of Austin College Students

Austin College graduates pursue a wide variety of options upon graduation. One of the most striking characteristics of the data is that, in contrast to other schools in our region an almost equal percentage of our graduates enter graduate or professional school as opt for full-time employment. Between 2007 and 2011, an average of 38% opted for full-time employment immediately upon graduation, while about 40% entered graduate or professional school (see Chart 1).



**Chart 1. Career Paths of Austin College Graduates 2007-2011**

*Data compiled by Career Services Office six months to one year following graduation of 2007-2011 alumni with a 95% response rate. Percentages represent an average of these five years' data.*



- Full-Time Employment
- Graduate & Professional Schools
- Prestigious Fellowships & Service
- Seeking Full-Time Employment
- Post-Graduate Experiences

Our success in placing students in graduate programs sets us apart from other schools in the region. According to Chart 2 below, while 39.3% of Austin College 2010 graduates planned to enter graduate or professional school, UNT and UTA graduates pursue such options at a rate of 21% and 24%, respectively, while UTD students are at 35%. All three of the other schools' graduates enter the work force more immediately (74%, 70%, and 63%, respectively).

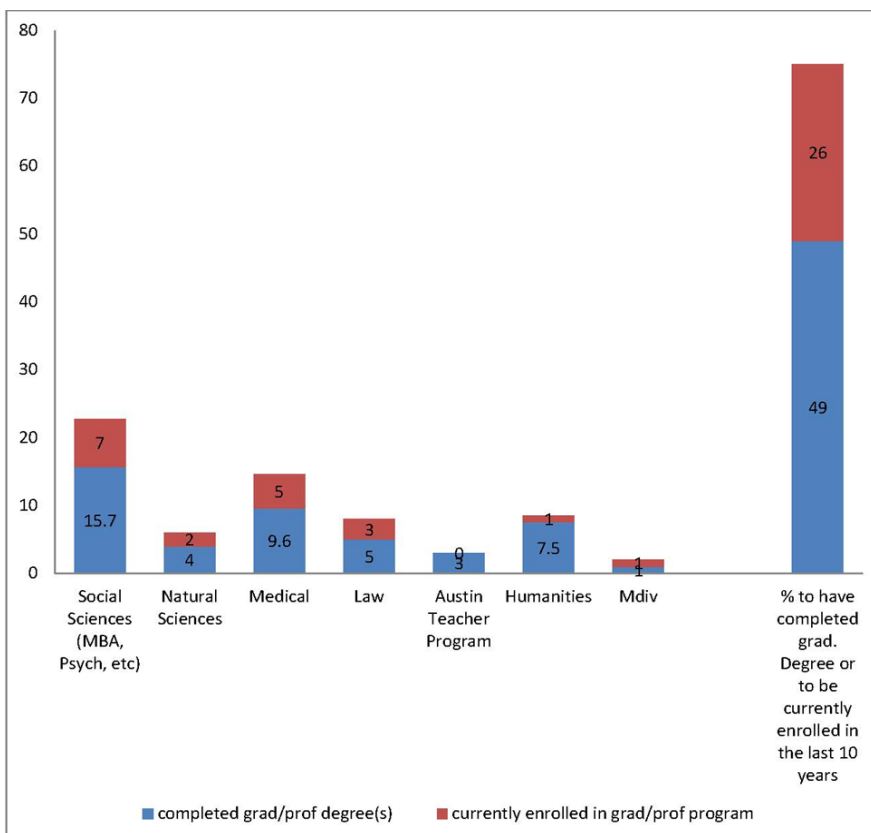
**Chart 2. Comparison of Plans of Graduating Seniors**  
 AC data from 2009-2010 CIRP Survey of AC Seniors; other schools' data from 2010-11 survey available at *College Portraits*, <http://www.collegeportraits.org>.

	Austin College	UNT	UTA	UTD
<b>Attending graduate/professional school</b>	<b>39.3%</b>	<b>21%</b>	<b>24%</b>	<b>35%</b>
<b>Working full-time</b>	<b>44.0%</b>	<b>74%</b>	<b>70%</b>	<b>63%</b>

Another post-graduate path for 12% of Austin College graduates falls under the heading of “post-graduate experiences,” which include certification programs, military service, law enforcement, international living, or mission interests. 5% of our students receive prestigious fellowships, such as Fulbright, Peace Corps, AmeriCorps, Teach For America, Presbyterian Church USA Young Adult Volunteers, Japanese Exchange and Teaching Program, or Project Uplift.

**Graduate School**

Liberal arts colleges are well known for producing higher rates of graduates who earn Ph.D.’s (See Lemke [2006], Cech [1999], Siegfried and Stock [2007], Burelli, Rapaport, Lehming [2008], and 2005-2011 *Colleges That Change Lives Report*). Since the 1970’s, graduates of liberal arts colleges have earned Ph.D.’s at a rate between 1.5 and 2.5 times more than graduates of research universities (Cech [1999]). Reflective of this, Austin College has historically sent large numbers of students to graduate school (see Chart 3). For



**Chart 3. 2002-2012 Alumni and Graduate School** Source: Austin College Alumni Survey (2012), Office of Institutional Research. Data from last ten years of alumni, 2002-2012.

Note: Since the Austin Teacher Program is a fifth-year graduate program, the 2012 graduates enrolled in the program would not report being enrolled in our graduate program.

example, 36.6% of AC graduates pursue graduate/professional school within the first year (2005-2011 average). Professional programs accounted for 43.1% of those students (2.4% Engineering; 2.5% Divinity; 9.3% Law; and 28.9% Health) with the remaining 56.9% being in fields such as Psychology, Economics, Environmental Studies, Social Work, MBA, and MPA.

The percentage of Austin College graduates who go on to graduate or professional school actually increases when one surveys students five years after graduation and beyond. Often AC graduates will wait a few years and then pursue an advanced degree. According to the Austin College Office of Institutional Research, 63% of graduates enter graduate or professional school within five years of graduation. According to a survey of alumni from the last ten years (2002-2012), 75% of our alumni had completed an advanced degree or were currently enrolled in a graduate program by the tenth year after graduation from Austin College. 49% had already completed an advanced degree, while 26% were currently enrolled in a program (see the column to the extreme right, in Chart 3).



Charts 4 and 5 show the changes in distribution of graduate school admissions test takers (and medical school matriculants) nationally as well as data for Austin College students enrolling in graduate programs that roughly correspond to these categories. We compared national trends in graduate school (as measured by the percentage of college students nationally taking graduate placement exams) with the number of Austin College students who indicate in exit surveys that they are or will attend graduate school after acceptance. The two charts are not directly comparable, as the first represents applicants and the second represents acceptances, but the relative interest in the graduate programs is useful to consider.<sup>1</sup> The most striking distinction between Austin College and the nation as a whole is the continuing strong interest and success in health science programs here. Nationally, the MCAT has been steady at 2% of college graduates, with approximately 1% of all college graduates matriculating to medical school. At Austin College the percentage of students entering graduate programs in the health sciences fluctuates between 22% and 35% of the Austin College class, attesting to the strong emphasis on preparation for health science careers at Austin College. It should be noted, however, that most Austin College students who go into the allied health fields do not take

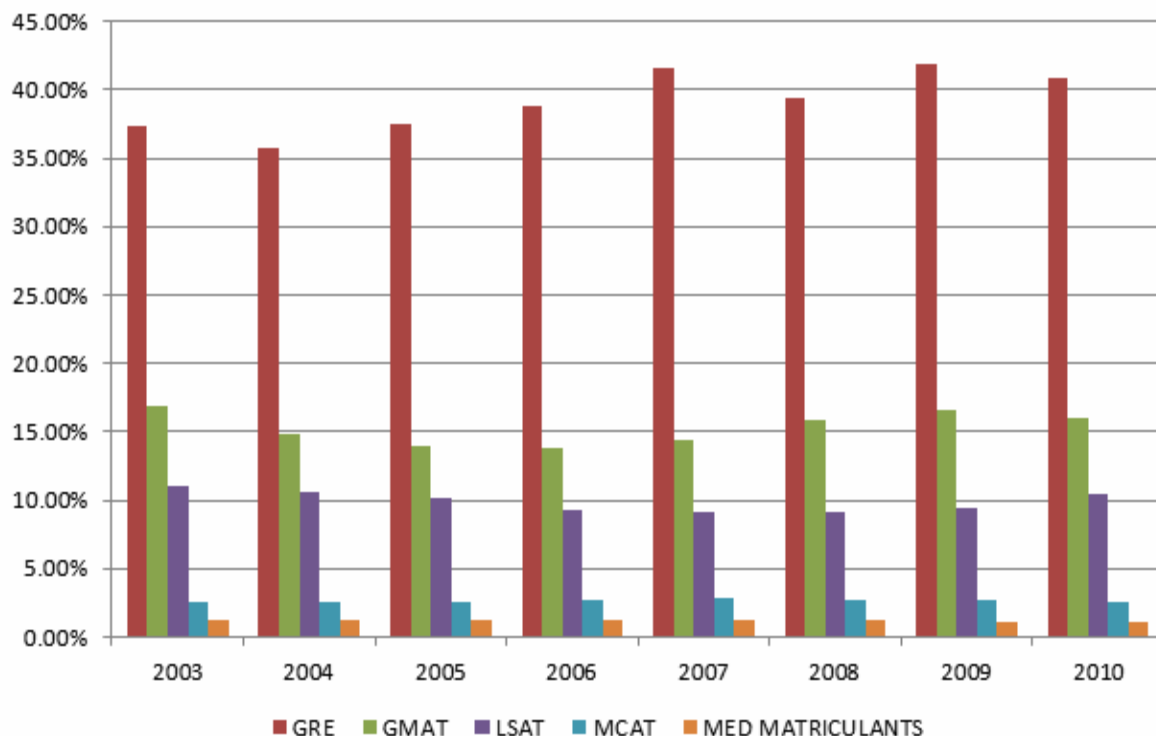
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<sup>1</sup> Please note that Chart 4 shows the percentage of students nationally taking placements tests in various areas, not the numbers of students eventually accepted and attending these programs. Directly comparable data for Austin College students are not available. Charts 4 and 5 are included to show that rates of growth and decline in graduate school interest and attendance at Austin College appear to differ from national trends. The magnitude of the numbers from Charts 4 and 5 cannot be compared directly.

the MCAT. About 10% of each Austin College graduating class takes the MCAT. This is still a very high percentage, significantly higher than the 2% national average shown in Chart 4. At Austin College, an additional 12-25% enter allied health fields which do not require the MCAT. This contextualizes the extraordinarily high percentages of Austin College students going into allied health fields in Chart 5.

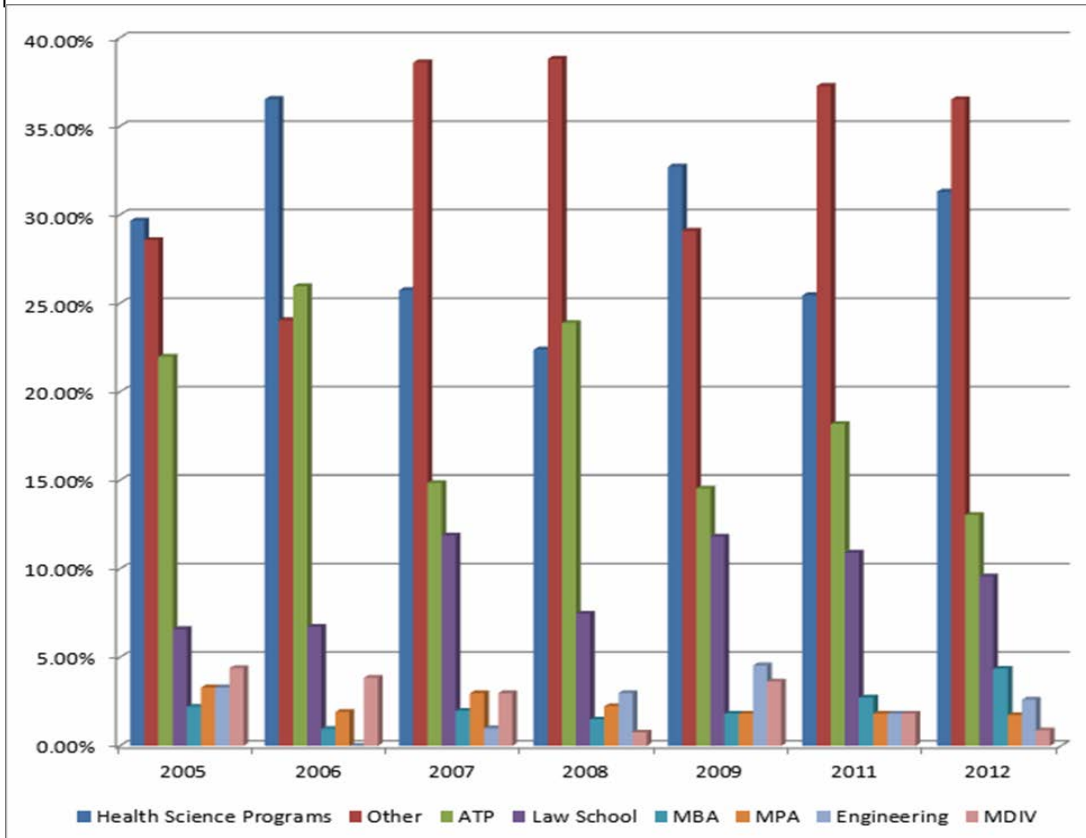
A second trend worth watching is the rising number of disciplinary graduate program matriculants. In Chart 5, “Other” includes the types of programs typically taking the Graduate Records Exam (GRE), which is the test for students planning on a disciplinary post-graduate experience, such as chemistry, political science, and English. The GRE is also required for some professional programs without a unique test, such as the Master of Social Work program. This indicates that Austin College students are part of the national trend to seek advanced graduate study in an academic discipline. Our third largest graduate program is the Austin College Teacher Program (ATP), which has declined somewhat from a high of 26% of graduates to a current 14%. The fourth largest graduate program is law school, to which 10% of Austin College students plan to go. The remaining programs—MBA, MPA (public administration), Masters in engineering, and MDiv (ministry)—make up the remaining 10% of post-graduate experiences of Austin College graduates.

**Chart 4. Graduate School Test Trends Nationally**



### Chart 5. Austin College Graduate School Plans

Based on AC Senior Exit Surveys, 2005-2012.



Overall, Charts 4 and 5 illustrate some strengths and weaknesses in the Austin College graduate school experience. The college's strengths in the health sciences and pre-law programs are evident, and an increasing number of students are pursuing disciplinary non-professional graduate education. These numbers suggest that Austin College's reputation for excellent academic programs in pre-professional programs is well-deserved, and that faculty members are helping students with strong disciplinary interests to find appropriate placements. Austin College students are far less likely to pursue graduate education in business, however. This is explained partly, but not completely, by the preference that prestigious graduate business programs place on job experience. It also reflects the fact that business graduates from Austin College are more likely to seek and find employment immediately upon graduation. It may also indicate a lost opportunity to attract and place students who would benefit from graduate business education.

As noted in Chart 5, 14% of 2012 Austin College graduates who plan to go to graduate school, plan to enter the Masters of Arts (MAT) program in the Austin Teacher Program. This makes the ATP the third highest category of where AC students plan to go to graduate school. This past year 18 students matriculated into the Austin Teacher Program. During that year we also had approximately 5 students who decided not to continue the program



after completing undergraduate education coursework citing financial concerns as one of the factors in their decision.

The recent decrease in the number of ATP graduates mirrors the decrease in the number of teacher certifications at the state level and the recent budget cuts to education decreasing the ability of districts to hire new teachers. Even so, of the 18 teacher candidates who completed their MAT in 2013, 17 have already reported finding employment in Texas public or private schools. Of these 17, five had internships in the fall of 2012 allowing them to work full time while completing their student teaching requirement for their Masters of Arts in Teaching. Additionally, students who were unable to find positions the year before have now reported finding positions for the coming school year as districts' ability to hire has improved.



An analysis of the 2010-2011 state data of 370 Austin Teacher Program graduates currently working in Texas Public Schools shows that the current top employers of ATP graduates are: Sherman ISD, Frisco ISD, McKinney ISD, Plano ISD, Mesquite ISD, and Denison ISD. Among private institutions, Jesuit College Preparatory School of Dallas is a leading employer. Though this data does not fully capture the graduates who are currently teaching out of state, have moved into higher education positions, or work in private schools, it does demonstrate the pattern that many of our graduates are employed within the Dallas metroplex. Though many students work in suburban schools, we also have graduates seeking employment in more rural and urban contexts as well.

Additional analysis of program data also demonstrates that Austin Teacher Program graduates often pursue further education and certifications. In an analysis of data of the decade alumni survey results received in 2009, a comparison of ATP and non-ATP AC alumni working in education revealed that 91.1% of ATP graduates are involved "sometimes" or "frequently" in professional development activities. 67.3% of the non-ATP teachers were involved at the same level. Our files from May 2013 indicate that of the graduates from 1989 on, at least 101 have added a credential to teach English as a Second Language, 20 have added Special Education, 7 added a bilingual certification, and 10 have added a gifted and talented endorsement. We also have records of 58 graduates adding a certification in an additional content area.

The commitment of ATP graduates to professional learning is also demonstrated through the professional trajectories of our alumni. The recent data on 370 graduates working in Texas Public Schools shows that are graduates are working in the following roles:

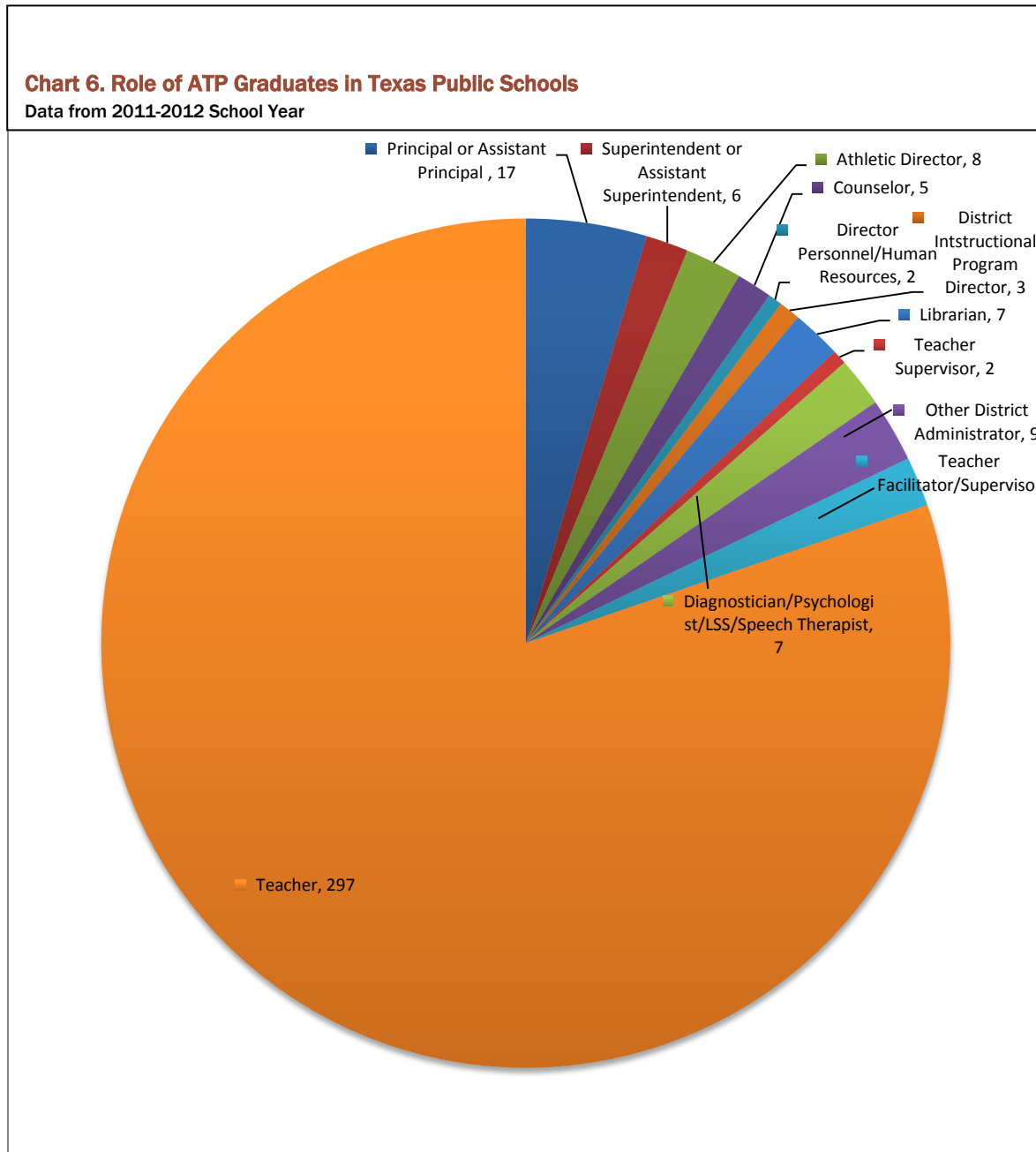


Chart 6 highlights that 73 (19.7%) of the 370 graduates included in the data moved into mid or higher level administrative positions. To have approximately 1 in 5 graduates move into upper level positions is a relatively large statistic considering that the data does not include many other graduates working in private school leadership positions, out-of-state positions, or other education related careers. It is also important to consider that a number

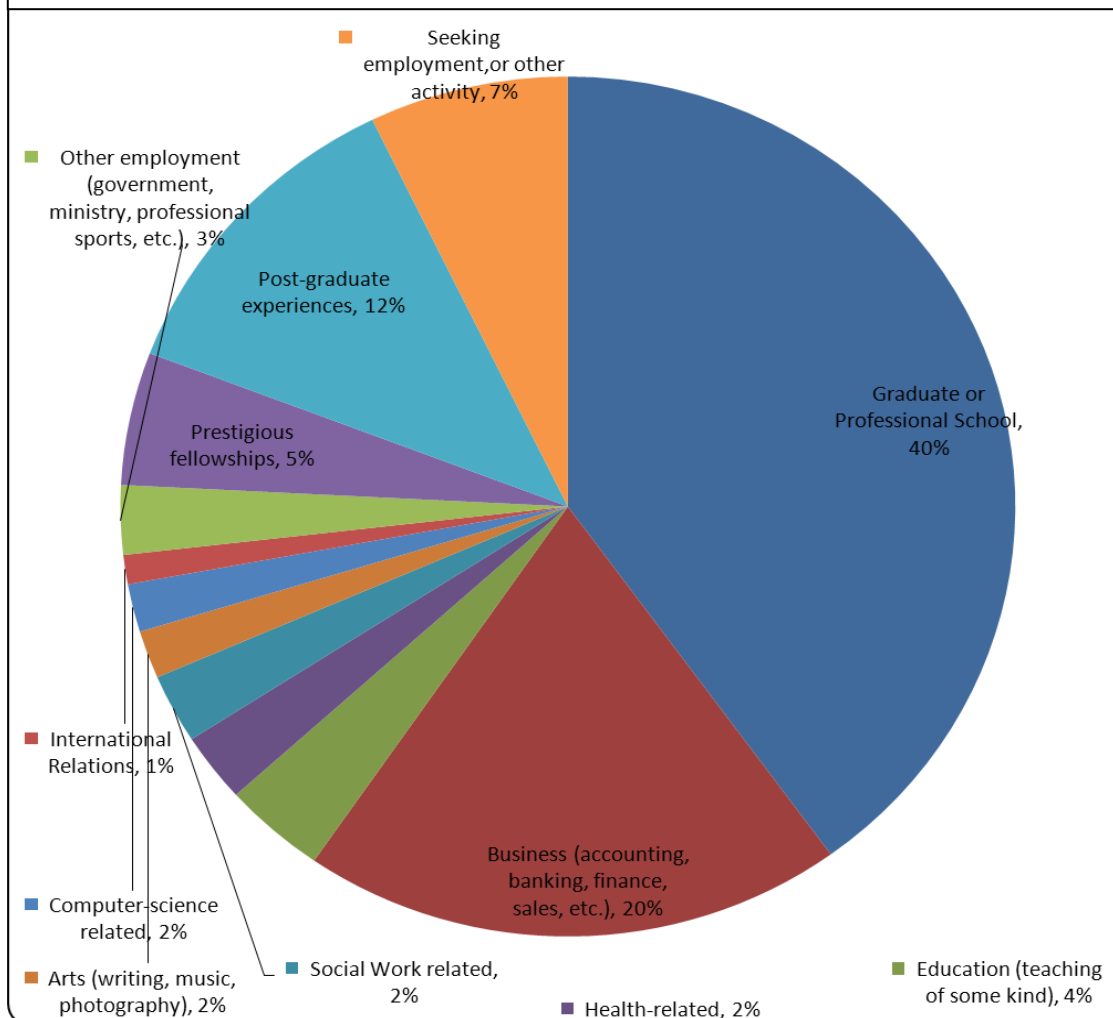
of years are needed before recent graduates would be considered for administrative level positions/credentialing.

### Employment

Aside from the students who pursue graduate school or prestigious fellowships, service or training, many Austin College graduates proceed directly to the job market. In 2011, for instance, 36% opted for employment. Chart 7 shows the categories of jobs that 2011 graduates took immediately upon graduation. It is important to note that many of these graduates will probably change jobs in the near future. The impact of a liberal arts degree on employment opportunities is sometimes more evident five years after graduation. It is also noteworthy that by far the largest percentage of jobs is in the business sector. 19.2% of the 2011 graduating class obtained a job in business (accounting, finance, insurance, manufacturing, consulting, or sales). It will be important to pay attention to what kinds of skills these employers are seeking in our graduates.

**Chart 7. 2011 Austin College Graduates**

Employment data for 2011 graduates was collected by the Career Services Office one year after graduation. Non-employment data (e.g., graduate school, post-graduate experiences, and fellowships) are based on 2007-2011 alumni data with a 95% response rate. Percentages for non-employment categories represent an average of these five years' data. Note: 36% (96 of 265 of graduates) took jobs in 2011.



## II. What Employers and Graduate/Professional Schools Want, and What Austin College Provides

### Employer Priorities

According to a 2013 Association of American Colleges and Universities (AAC&U) survey, in addition to recognizing the value of broad knowledge in the liberal arts and sciences employers want colleges to place more emphasis on the following specific learning outcomes.

1. Critical thinking and analytical reasoning skills
2. The ability to analyze and solve complex problems
3. The ability to effectively communicate orally
4. The ability to effectively communicate in writing
5. The ability to apply knowledge and skills to real-world settings
6. Information literacy
7. The ability to innovate and be creative
8. Teamwork skills
9. The ability to connect choices and actions to ethical decisions
10. Knowledge about science and technology
11. The ability to work with numbers and understand statistics
12. Knowledge about global issues
13. Civic knowledge

Another recent survey, the *Job Outlook Survey 2013* conducted by the National Association of Colleges and Employers (NACE), came up with a similar list of skills most sought by employers, but one additional skill in their top five: the ability to plan, organize, and prioritize work.

In December, 2012, *The Chronicle of Higher Education* and American Public Media's *Marketplace* conducted a similar survey and an abundant, diverse sample of top employers responded. This third survey confirms many of the priorities listed in the other two, but it also makes a few additional suggestions. Here are their top five implications for colleges and universities:

- Colleges and universities should seek to break down the false dichotomy of liberal arts and career development—they are intrinsically linked.
- Colleges and universities should support rich experiential opportunities that truly integrate the liberal arts with real-world learning as communication skills and problem solving skills. These are in high demand, seen as lacking, and seen as a college's responsibility to teach.
- Colleges and universities should view the working lives of their students not as a challenge, but as an opportunity, given the weight employers of all kinds place on experiential elements of a recent graduate's résumé.
- For colleges and universities an "employment brand", a pillar of a larger "outcomes brand" matters. If an institution is not known to employers, graduates will suffer the consequences when seeking jobs.

- Colleges should go beyond a vision of majors articulating to specific careers. Majors matter to some extent, but in many cases, college major is not the determinant of career entry. A college should approach career development as career exploration for a great many of its students guiding and supporting students with the right mix of solid liberal arts skills and content knowledge.<sup>2</sup>

The *Chronicle* survey underscores the importance of the liberal arts as well as real-world experience. It places highest priority on the teaching of written, oral, and problem-solving skills. It also accentuates the importance of a well-rounded education and de-emphasizes the importance of a particular major. The findings of all three of these surveys confirm that in many ways an Austin College education makes our graduates uniquely suited for employment in today's marketplace. As Chart 8 will show, many of the priorities listed by employers are already a vital part of the Austin College curriculum and co-curriculum.

### Graduate and Professional School Priorities

Many of the skills employers look for are also ones that graduate and professional schools seek. For example, the results of a survey of 143 graduate programs in clinical, experimental, and industrial-organizational psychology (Appleby, Keenan, & Mauer, 1999) indicated the following skills and characteristics (listed in order of importance) are what these programs value most about candidates.

1. Research skills
2. Writing skills
3. Speaking skills
4. Teaching skills/potential
5. Teamwork
6. Creativity and originality
7. Strong knowledge of area of study
8. Specialized technical or computer skills
9. Analytical ability
10. Broad general knowledge
11. Intellectual independence
12. Leadership

### What an Austin College Education Provides

In general, the Austin College curriculum and co-curriculum provide students with the skills and credentials desired by both employers and graduate/professional schools. Austin College degree requirements align well with the skills desired by both employers and graduate and professional schools, according to the surveys mentioned above. In Chart 8,

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<sup>2</sup> p. 15, Chronicle of Higher Education, *The Role of Higher Education in Career Development: Employer Perceptions*, December 2012.

<<http://chronicle.com/items/biz/pdf/Employers%20Survey.pdf>>. For related articles, see also Singh, Raghav, "Generation U: Too Many Underemployed College Grads." *ERE Daily*, 19 July 2013, and Sternberg, Robert J., "Giving Employers What They Don't Really Want." *Chronicle of Higher Education*, 17 June 2013.

we have listed some of the strongest examples from specific degree programs and co-curricular programs. The chart lists only a few of the curricular and co-curricular examples of each priority listed by employers and graduate/professional schools. The purpose of this chart is to illustrate the diverse ways an Austin College student might access these desired skills throughout the curriculum and co-curriculum. These examples are not meant to be comprehensive. Regarding the co-curricular examples, it is important to note that the chart is not exhaustive and many organizations meet several of the characteristics listed. For example, varsity athletics is an obvious example of teamwork but also encompasses complex problem-solving, applied knowledge in real world settings, and civic knowledge, as a majority of teams complete service work as team-building opportunities. The same can be said for many organizations and their potential for students not only to gain valuable skills but to apply those skills in real-world scenarios.

### Chart 8. Employer and Graduate/Professional School Preferred Learning Outcomes and the Austin College Curriculum and Co-Curriculum

Employer and Grad./Prof. School Learning Outcome Priority	Austin College Curricular Examples	Austin College Co-Curricular Examples
<i>Critical thinking;</i>	<ul style="list-style-type: none"> <li>Formally assessed as part of most course and program outcomes</li> </ul>	<ul style="list-style-type: none"> <li>Panel Discussion on Muslim Women by Muslim Student Association</li> <li>PRIDE Film Screenings</li> </ul>
<i>Broad knowledge in the liberal arts and sciences</i>	<ul style="list-style-type: none"> <li>Breadth requirements</li> <li>17 Mellon partnered courses</li> </ul>	<ul style="list-style-type: none"> <li>ECOS</li> <li>French Club, German Club, Classics Club, Philosophy Club</li> <li>English Country Dance Club</li> </ul>
<i>Complex problem solving</i>	<ul style="list-style-type: none"> <li>Addressed in depth dimension</li> <li>Problem-based learning in various disciplines</li> <li>Undergraduate research program</li> <li>Honors theses</li> </ul>	<ul style="list-style-type: none"> <li>Conflict Resolution Training in Residence Life</li> <li>Campus Activity Board</li> </ul>
<i>Written and oral communication</i>	<ul style="list-style-type: none"> <li>Foundation (C/I)</li> <li>Writing course competency</li> <li>Creative writing major emphasis and minor</li> <li>Emphasis in writing in many depth dimension, breadth, and election courses</li> <li>Model U.N.</li> <li>Honors theses</li> </ul>	<ul style="list-style-type: none"> <li>Chromascope (Yearbook)</li> <li>The Observer (Bi-monthly paper)</li> <li>Suspension (Literary Magazine)</li> <li>Acumen (Student Research Journal)</li> </ul>
<i>Applied knowledge in real-world settings</i>	<ul style="list-style-type: none"> <li>Internships (On and Off Campus)</li> <li>Study abroad emphasizes cultural immersion and integration</li> <li>Career Study Off-Campus (CSOC)</li> <li>Environmental Studies initiatives</li> <li>Austin Teacher Program field placement courses</li> <li>Student Investment Fund course (endowed for \$1M)</li> </ul>	<ul style="list-style-type: none"> <li>Student Assembly</li> <li>Peer Educators, Peer Tutors</li> <li>Paid internships and campus jobs</li> <li>AC Day Trading Club</li> </ul>

<b>Information literacy</b> <i>Ability to obtain and process Information (NACE)</i>	<ul style="list-style-type: none"> <li>• Foundation (C/I)</li> <li>• Digital humanities initiative</li> <li>• Media Studies major and minor</li> <li>• Honors theses</li> </ul>	<ul style="list-style-type: none"> <li>• The Observer,</li> <li>• Chromascope</li> <li>• Acumen</li> </ul>
<b>Innovation and creativity</b>	<ul style="list-style-type: none"> <li>• Art major, minor, and breadth courses</li> <li>• Creative Writing major emphasis, minor, and breadth courses</li> <li>• Entrepreneurship- focused classes in Business Administration</li> </ul>	<ul style="list-style-type: none"> <li>• SOMA Open-Mic Night</li> <li>• AC Aussies,</li> <li>• AC Dance Club</li> <li>• KangaRAAS</li> </ul>
<b>Teamwork</b>	<ul style="list-style-type: none"> <li>• Model U.N.</li> <li>• Numerous group projects in many disciplines</li> </ul>	<ul style="list-style-type: none"> <li>• Intramural Sports/Club Sports</li> <li>• Varsity Athletics</li> <li>• Greek Organizations</li> <li>• Board of Service Station</li> </ul>
<b>Ethical decision making</b>	<ul style="list-style-type: none"> <li>• Posey leadership courses</li> <li>• Business Administration and Economics courses</li> <li>• Philosophy courses</li> </ul>	<ul style="list-style-type: none"> <li>• Varsity Athletics (Sportsmanship)</li> <li>• Student Judicial Board</li> <li>• Student Representatives on Academic Integrity Council</li> <li>• Greek Council</li> <li>• HEAT</li> </ul>
<b>Science and technology</b>	<p>Science:</p> <ul style="list-style-type: none"> <li>• Undergraduate research program</li> <li>• Science division majors and minors</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Med Society</li> <li>• Biology Interest Group</li> <li>• Computer Science/Robotics</li> <li>• Society of Physics Students</li> </ul>
	<p>Technology:</p> <ul style="list-style-type: none"> <li>• No competency requirement in technology</li> <li>• Digital humanities initiative</li> <li>• Computer science major and minor</li> <li>• Excel JanTerm course</li> <li>• Austin Teacher Program e-portfolios</li> </ul>	
<b>Quantitative reasoning</b>	<ul style="list-style-type: none"> <li>• Quantitative reasoning competency</li> <li>• Science division major and minors</li> <li>• Social sciences division majors and minors</li> </ul>	<ul style="list-style-type: none"> <li>• Budget formulation for chartered organizations</li> <li>• Budget planning for CAB</li> </ul>
<b>Global knowledge</b>	<ul style="list-style-type: none"> <li>• 70% of all students have a study abroad experience</li> <li>• Foreign language competency</li> <li>• Rigorous, robust language program, including language house immersion experience</li> <li>• Language and/or cultural immersion JanTerms</li> <li>• International Economics and Finance major</li> <li>• International Relations major</li> <li>• Model U.N.</li> </ul>	<ul style="list-style-type: none"> <li>• Go! Fellowship</li> <li>• Athletes playing abroad</li> <li>• Cultural Groups (i.e. Indian Cultural Association, Los Amigos, Student International Association)</li> <li>• Awareness Groups (i.e. Amnesty International, Global Medical Brigades)</li> <li>• International Relations Club</li> </ul>
<b>Civic knowledge</b>	<ul style="list-style-type: none"> <li>• Community service and policy minor</li> <li>• Internships</li> <li>• Model U.N.</li> </ul>	<ul style="list-style-type: none"> <li>• Many co-curricular activities include strong service components.</li> <li>• Service Station</li> <li>• Habitat for Humanity</li> <li>• Rotoract</li> </ul>

		<ul style="list-style-type: none"> <li>• Student Political Organization</li> </ul>
<i>Research skills (graduate and professional schools)</i>	<ul style="list-style-type: none"> <li>• Undergraduate research opportunities in sciences, social sciences and humanities</li> <li>• Summer research in biology and chemistry</li> <li>• Scarborough Fellowships in Social Sciences and Humanities</li> <li>• Austin College Student Scholarship Conference</li> </ul>	
<i>Teaching skills (graduate and professional schools)</i>	<ul style="list-style-type: none"> <li>• Austin Teacher Program</li> <li>• Teaching opportunities in C/I (as CLs)</li> <li>• Lab assistants in sciences</li> </ul>	<ul style="list-style-type: none"> <li>• Peer Tutoring (Academic Skills Center)</li> <li>• Volunteer tutoring of K-12 students</li> </ul>
<i>Strong knowledge of area of study (graduate and professional schools)</i>	<ul style="list-style-type: none"> <li>• Depth dimension (major and required minor)</li> </ul>	
<i>Intellectual independence (graduate and professional schools)</i>	<ul style="list-style-type: none"> <li>• Honors theses</li> <li>• Directed and independent study</li> <li>• Individually designed major</li> </ul>	
<i>Leadership (graduate and professional schools)</i>	<ul style="list-style-type: none"> <li>• Posey Leadership Institute</li> <li>• Small class size and focus on undergraduates allow leadership roles many disciplines, not available at larger schools</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for leadership in many organizations</li> </ul>
<i>Ability to plan, organize, and prioritize work (NACE)</i>	<ul style="list-style-type: none"> <li>• undergraduate research projects</li> <li>• honors theses</li> <li>• capstone course projects</li> <li>• group work in many courses</li> </ul>	<ul style="list-style-type: none"> <li>• Campus Activity Board service</li> <li>• Organization of large projects and events (Roo Boo, Masala, Great Day of Service, etc.)</li> </ul>

## Pre-Professional Program Preparation

The Epilogue working group conducted interviews with the pre-professional advisors Dr. Jack Pierce (Dental, Health, Medical, and Veterinary), Dr. Don Salisbury (pre-Engineering), Dr. Frank Rohmer (pre-Law), and Dr. John Williams (pre-Ministry). The responses about premed and prelaw are particularly pertinent to this report.

Professional programs at Austin College often require students to self-identify and take particular coursework for them to be eligible for continued study after finishing a baccalaureate degree. At Austin College these “Pre” programs include Allied Health (physical therapy, occupational therapy, physician’s assistant), Dentistry, Engineering, Law, Medicine (MD and DO), Ministry, and Veterinary Medicine. The standard of assessment of preparedness for postgraduate work usually involves a checklist of required and recommended courses that, while not constituting a major, assemble the knowledge content that professional programs deem necessary for admission. Course work combined with GPA and scores on a standardized test for that respective discipline (MCAT, LSAT, and GRE) constitute the minimum requirements for admission.

According to the Austin College Pre-Medical Adviser, Dr. Jack Pierce, medical schools have not modified their admission standards very much. GPAs and MCAT scores are still very important, although they are looking for good students from underrepresented groups and students who have a true interest in primary care (however, many students do not really know at this stage if they are committed to becoming a primary care physician). There will be a new medical school in Austin as of 2016, which will open more enrollment opportunities (the new school will plan to start with 50 students).



Pre-Law advisor Dr. Frank Rohmer noted that owing to the tight job market for lawyers over the past five years, law school applications nationally are down, causing law schools other than those in the top ten or so to lower their LSAT and/or GPA requirements. This is especially true for lower tier schools, which are having a difficult time meeting their enrollment needs. This situation also opens up chances for more students to be accepted into law school. We have few problems with our students getting into law school. On first application, 87% are accepted; within five years 89%. However, it is still necessary to practice conscientious advising, so that weaker students who might not succeed in law school or at the bar despite their admission, do not get saddled with high debt, especially when job and income prospects are not bright. It is important therefore to advise each student individually according to their strengths and interests. Dr. Rohmer goes on to suggest that our honesty and realism with students together with our knowledge of them gives us a great advantage over large schools or schools with poor pre-law advising programs.

Regarding teacher preparation, some noteworthy trends in the field are:

- a desire for higher admissions standards;
- increased coursework on teaching to curricular standards and using research-based practices for instruction in areas such as reading/literacy;
- more attention to the content preparation of future teachers;
- a closer coupling between the educational theory taught in teacher preparation programs and the real-world needs of schools and students.

Chart 9 shows a comparison between state requirements and ATP program components on these factors.<sup>3</sup>

**Chart 9. Analysis of Austin Teacher Program on Focal Program Features Highlighted in National Reports**

Focal Program Feature	State Requirements	Austin Teacher Program
Admissions Requirements	2.75 Cumulative GPA	2.75 Cumulative GPA
	No content specific GPA requirement, 12 semester hours in the content area	BA requirement, 3.0 Content-specific GPA
		Major/Minor in subject area for secondary teachers. There is a list of specific required courses by field created in conjunction

<sup>3</sup> National Reports referenced include the June 2013 *Teacher Prep Review* by the National Council on Teacher Quality and “Educating School Teachers” by Arthur Levine (2006).

		with the respective AC departments that are aligned with state content standards (TEKS). There is no GRE requirement since most candidates completed their BA at Austin College and have a 3.0 in their content field.
Early Field Experience	30 hours prior to entering the program. 15 hours can be completed through viewing media.	Elementary candidates – approx. 220 hours including 3 separate placements for elementary level mathematics, literacy, science/social studies methods  Secondary candidates – 140-166 hours (minimum of 3 separate placements)  Successful teaching evaluations in Education 351 and Education 475 are required for admission into the Austin Teacher Program.
Student teaching (Theory to Practice)	12 weeks (480 hours)	13 weeks (520 hours)
Content-specific preparation	No state requirement for subject specific methods course	Elementary candidates – Have methods courses for math, literacy, social studies/science with accompanying field placements  Secondary candidates – Subject specific methods course with accompanying 6-9 week field placement. Secondary candidates also take a course on developing content-area literacy.

As noted in the chart above, Austin College surpasses state admissions requirements with a notable strength in the area of field experience hours and content preparation. High passing rates by candidates on state certification tests further demonstrate strong content and pedagogical preparation.

### **Disciplinary Graduate Program Preparation.**

To further investigate the strengths and weaknesses of preparation of the Austin College student for professional programs and graduate school, the working group also surveyed department chairs. The survey asked them to evaluate the preparation of graduates in their department or program. Overall, 14 departments/programs responded to the survey

representing a diversity of programs in the sciences, social sciences, humanities, and fine arts.

Faculty overwhelmingly noted that AC students were prepared for graduate work; 78% of department heads surveyed reported that the average student in their department was prepared. Our graduates have strong skills including writing and critical thinking because of the high level of expectation in our courses. Undergraduate research and study abroad were also reported to significantly strengthen our students' applications to graduate school. Austin College has a strong reputation for preparing the types of students that successfully complete professional programs. The limited programs that have experience with our students see them as highly desirable applicants. Additionally, the overall acceptance rate to professional schools is  $\geq 80\%$  when looking at a 3-year window after graduation (based on internal statistics maintained by each advisor). There is also strong two-way communication between the professional programs and the on-campus advisors.

### Co-Curricular Preparation

Psychologists and educators for decades have pointed to the importance of co-curricular experience as integral to the development of the whole student. From Arthur Chickering's *Education and Identity* (1969) to Alexander Astin's *Theory of Involvement* (1985), and more recently George D. Kuh's *Unmasking the Effects of Student Engagement on College Grades and Persistence* (2007), the amount of literature and research dedicated to the issue of holistic education and integration is extensive. That said, with the proliferation of online distance learning, Massive Open Online Courses (MOOCs), and a sharp increase in the number of students choosing to remain at home combined with shrinking campus budgets, the co-curricular experience is at risk for deterioration or even elimination.

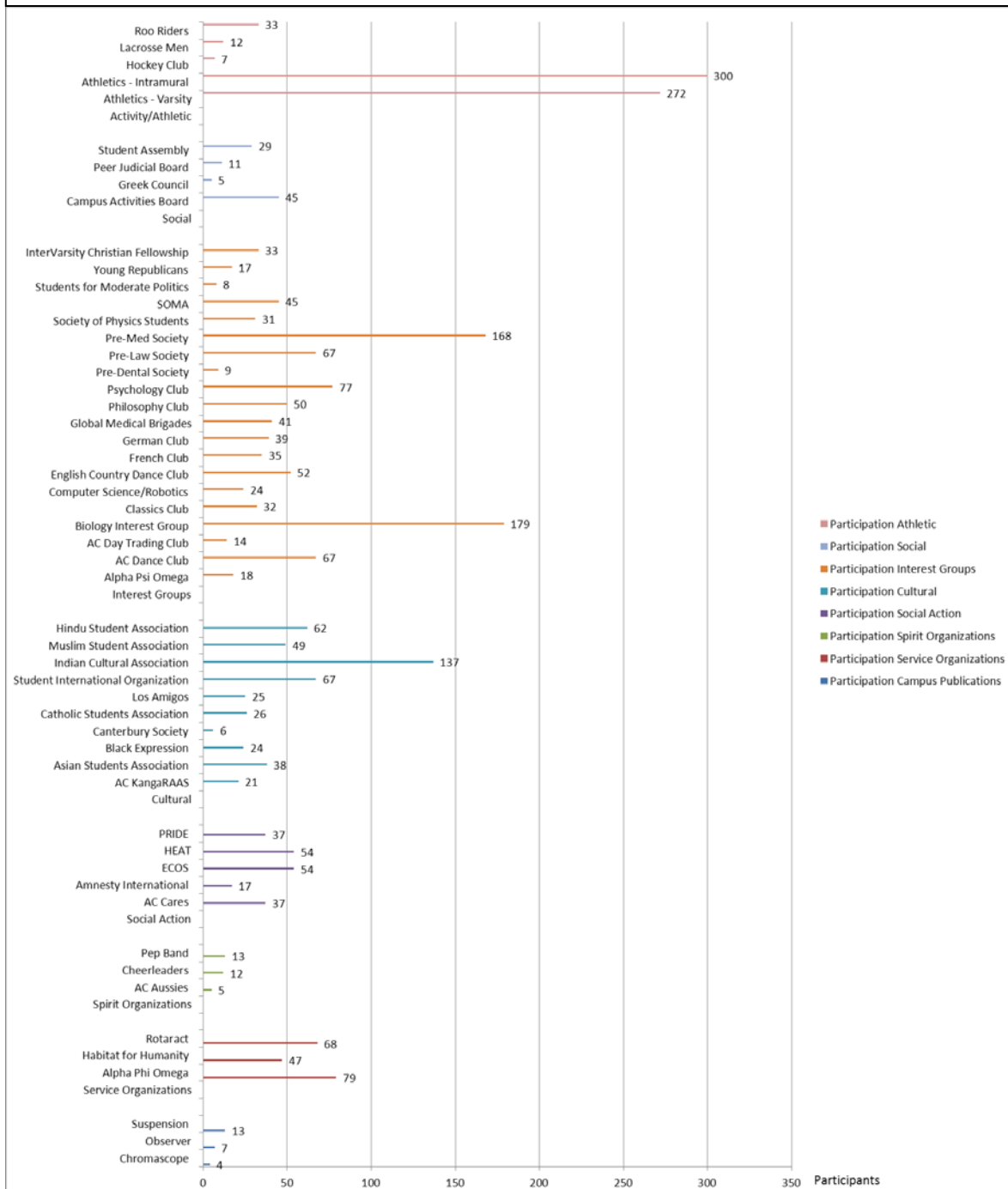
Co-curricular preparation is vital. According to Astin, "Peer groups are the strongest single source of influence on cognitive and affective development in college." Students have the opportunity for practical application of newly acquired skills as they interact with peers in dorms, on athletic teams, and as they complete service projects in their communities. Research confirms that co-curricular activities reinforce many skills valued by both employers and graduate and professional schools: critical thinking, ethical decision making, problem solving, leadership, teamwork, among others. In an interview with the *New York Times*, Mara Swan, the executive vice president of global strategy and talent at Manpower Group stated, "There's always been a gap between what colleges produce and what employers want....When it comes to the skills most needed by employers, job candidates are lacking most in written and oral communication skills, adaptability, and managing multiple priorities, and making decisions and problem solving." She goes on to say that employers report consistently the same issues: "problems with collaboration, interpersonal skills, the ability to deal with ambiguity, flexibility, and professionalism." Co-curricular preparation has the potential to be a great differentiator.

### The Value of the Austin College Co-Curricular Experience

The impact of student involvement outside the classroom is important to the general student's college experience, grades, persistence, and later success, all of which has been consistently demonstrated in broad general populations.

Austin College is a very active campus. Chart 10 shows participation rates as reported by the Student Life Office for the 2013 spring semester. They have been grouped together in broader genres for comparison purposes. It should be noted that Greek Life as well as Residence Life have not been included in any of the lists below as they exist as separate entities. At Austin College, 28% of students participate in a fraternity or sorority while there are 23 students working as Resident Assistants or in other Student Life capacities.

**Chart 10. Austin College Student Organization Participation - Spring 2013**



How much do students really gain from their participation in these organizations? While we know what each group has the potential to offer, we are unsure as to what is actually experienced and the range of that experience can be vastly different within the same organization. Assessment models for student engagement and involvement are plentiful, but not always easily adaptable to individual campuses. Further study is needed in this area.

### III. Strengths and Weaknesses

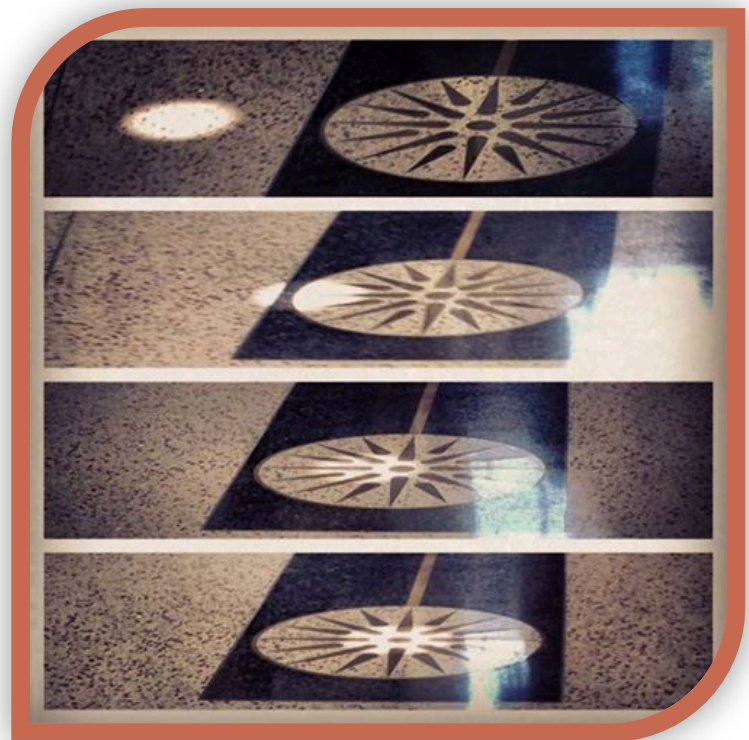
#### Strengths

**Academic Rigor and Preparation.** Our academic curriculum provides excellent preparation in many areas. Austin College courses give students rigorous training in critical thinking, expressive writing, and effective oral communication. Whether it is a meticulous lab report in biology, a carefully constructed survey instrument for a study in psychology, or a textual analysis in American literature, Austin College students are provided many opportunities to hone their ability to analyze complex problems, to arrive at innovative solutions, and to communicate these in a clear, concise language. All Austin College students are required to take at least one laboratory science before graduation. Lab courses, like most courses at Austin College, are small, and faculty members provide a lot of personalized attention for students. As Chart 8 demonstrates, the Austin College curriculum and co-curriculum map quite well onto the employer and graduate school priorities.

#### Interdisciplinary Connections.

Our students often have a unique breadth of knowledge in a diversity of disciplines. They discover exciting new connections between disciplines. For example, through the Mellon partnered course program, Austin College faculty members have team-

taught 17 courses, allowing students to discover relationships between fields as diverse as anthropology and Latin American studies, Japanese culture and ceramics, and African politics and literature. We have ten interdisciplinary minors and/or majors that also help students make connections between disciplines. These include American Studies; Asian Studies; Cognitive Science; Environmental Studies; Gender Studies; Global Science,



Technology, and Society; Latin American and Iberian Studies; Non-Profit Organizations and Public Service; Southwestern and Mexican Studies; and Western Intellectual Tradition. Austin College also has an interdisciplinary program in leadership, a minor in leadership studies, has offered 8-10 classes annually since 2006 and engaged more than 800 students in this program of study. The Leadership Institute, one of the oldest in the country, has trained and engaged more than 100 students in advanced leadership studies comparable to executive education programs at major universities.

**Leadership and Applied Learning.** Austin College's small size and 13:1 student-faculty ratio allow students to gain hands-on, real-world experience in leadership roles, whether they are directing a play, conducting research collaboratively with a faculty member, or serving as an officer in one of 51 student organizations. January Term often provides a time when students can explore real-world career options by shadowing a physician or some other professional in order to explore possible career options through a Career Study Off-Campus (CSOC).

**Global Experiences.** Austin College has become nationally recognized as a leader in global education. Our students not only study abroad with frequency (over 70% do so before graduation), they also study abroad with depth and rigor. Our Center for Global Learning guides students and enables them to immerse themselves in foreign cultures, allowing them to participate in unique service projects and internships in the host countries. The Austin College study abroad program encourages students to reflect on the meaning of their international experiences, and each student receives customized guidance related to their future vocational choices.

**Mentoring.** Mentoring from faculty about how to prepare for and apply to graduate study was also reported as a strength of our program. Campus advisors for pre-professional programs dedicate a significant portion of their time to ensure that students are aware of the requirements for admission and work with students to acquire the experiences (CSOC, internships, medical mission trips, alternative spring break, etc.) necessary to distinguish themselves. Within the disciplines, many departments hold informational sessions on graduate school and professional opportunities as well as workshops on how to apply.

## Weaknesses

There is, of course, always room for improvement, and it would be good to explore ways to enhance what we already do well. A few areas of future exploration might include the following. This list is not exhaustive

**Written and Oral Communication.** Although all Austin College Graduates have met the written competency and many do extensive writing in their classes, our current written competency requirement can be inconsistent and some courses that require extensive writing currently do not qualify for the designation. There needs to be greater clarity. We do not currently have an oral competency requirement and not all disciplines lend themselves to oral presentations, thus it is not clear that our graduates have consistent training in this regard. While the freshman seminar covers both written and oral skills, the emphasis may vary from class to class. Overall we need more clarity and consistency.

**Information Literacy.** There is no current requirement for technological or informational literacy and it is not clear that we have a comprehensive plan to develop our students' facility with technological changes. In many cases our infrastructure prohibits further

expansion of digital learning (lack of updated software and hardware in many classrooms, bandwidth, etc.) and IT personnel is too overburdened to offer additional training for faculty or students.

**Applied Knowledge in Real-World Settings.** Although our students have many opportunities at home and abroad for internships and other types of experiential learning, we could expand these options to cover more fields. Since not all disciplines follow the same model of experiential learning we need to broaden our concept of applied learning to allow more students to gain experiences in this area.

**Some students lack research experience.** Some departments noted that a lack of undergraduate research experience is a problem at times. Often it is difficult to offer everyone research opportunities due to staffing as well as student abilities. Some students note a lack of community among students doing research.

The recent external review by the Council on Undergraduate Research (CUR) concluded that, although some Austin College students get a high level of experience with research, too many students are left out. For example, many talented students who are nominated to write honors theses do not complete them. The completion rate is, in fact, less than 50%. One of the main reasons for this low completion rate is the lack of adequate institutional support for students and faculty involved in honors theses.

2009-2010	2010-2011	2011-2012
46 nominated	39 nominated	57 nominated
21 completed	14 completed	18 completed

**Additional coursework sometimes needed.** While our students are well-prepared for the thinking and writing required in graduate school, they this sometimes have not taken certain courses that their peers at larger institutions have. Our students usually catch up quickly, but often do not investigate what additional work they may need beforehand.

**Weaker Students.** The data also suggest that while stronger students seek and receive excellent mentoring, weaker students may not. These weaker students sometimes apply to competitive graduate or professional programs with unrealistic expectations about their acceptance. However, it is unclear if this course of action is due to lack of access or to low receptiveness to quality mentoring. It may be that the type of mentoring that is appropriate for stronger or more motivated students is not the most appropriate approach for less self-directed students, who may need more proactive intervention to understand their opportunities. Students who realize and correct their respective deficiencies account for the very positive acceptance rates for 63% of alumni within 5 years of graduation.

**Limited Reputation.** The number of professional programs we interact with is very small. Although we have good relations with these programs, it ultimately limits the visibility of the college when we are only sending students to a small subset of potential programs or a limited geographic area (*i.e.*, Texas only). There are both pros and cons associated with expanding the applicable programs that would need to be addressed by each pre-professional program individually.

## IV. Recommendations

1. **Increase Opportunities for Hands-on, Experiential Learning, including Undergraduate Research.** Employers and graduate/professional schools stress the importance of real-world experience, and this can take many forms: meaningful internships, performances, artistic creations, or the many manifestations of undergraduate research, including honors theses, summer research, or research for directed or independent studies. Austin College has a strong tradition of experiential learning. We can build on this tradition.

In the opinion of the Epilogue working group, undergraduate research is one important form of experiential learning, but it is not the only one. Austin College can certainly get more students involved in undergraduate research by following some of the recommendations made by the recent external review by the Council on Undergraduate Research (CUR). One of their recommendations was to establish a more intentional scholarly community for students interested in undergraduate research or scholarly work and possibly interested in graduate school. This could facilitate mentoring about the processes of preparing and applying for graduate work and help students find a supportive and nurturing community as they work towards these goals.

But undergraduate research is not necessarily the best path for all students. The essential point is that all of our graduates need to have a significant level of experiential learning before they leave Austin College, whether through an honors thesis, lab research, an internship, a capstone project, a Scarborough Summer Research Fellowship, an senior exhibition in art, a theatrical performance, a poster presented at a conference, or some other culminating experiential project.

All students need to be able to point to such a tangible, culminating product of real-world experience. Whether through mentoring, curricular requirement, or some other intentional mechanism, Austin College must ensure that all students have had the opportunity for transformative, hands-on learning.

2. **Curricular Enhancements.** The faculty should carefully examine the present curriculum and ask whether there are ways to enhance its strengths and shore up any deficiencies. In particular we should examine how we teach written and oral communication. Should students have more of a shared curricular experience in this regard? Are all of our students getting the same preparation? Are there ways that the freshman seminar and other aspects of the curriculum could be strengthened in order to be even more effective?
3. **Teaching and Learning in the Age of Digital and Visual Literacies.** In order to prepare our graduates for the challenges and opportunities of the 21<sup>st</sup> century, we must provide them with the tools they will need to create the innovative projects of the future. It will be essential for Austin College to develop a forward-looking, practical plan for digital teaching and learning where appropriate across the curriculum. This plan should find ways to support faculty with release time, training, equipment, and facilities to deliver our curriculum in the best possible manner, whether digital or not. We must teach students using the most effective methods,



whether tried-and-true or cutting-edge. Where technology enhances teaching, we should embrace it; where it does not, we need not be distracted by flashy fads or trends just because they are technological. Related to the rise of digital learning and teaching is the growing importance of interpreting and communicating effectively through visual means. Visual literacy and awareness is an emerging trend in how businesses, government agencies, graduate and professional schools, and other entities communicate internally and externally. With the world becoming more and more one of visual learners, it will be increasingly important for Austin College to equip our graduates with the highest level of visual and digital sophistication. Important, too, will be partnerships with institutions large and small in order to create efficient, effective ways to create innovative, sustainable projects. Strategies for fundraising, through grantwriting and other advancement activities, will be key.

4. **Workplace competencies.** All Austin College graduates should demonstrate a significant level of competency in certain fundamental workplace skills. We can help our students by identifying what additional technical or analytical skills and/or certifications would make AC graduates better able to compete for jobs in the workplace. These skills and or certifications could be obtained from reputable on-line training through accredited programs, JanTerm courses, independent studies or otherwise. In addition, the Career Services Office should encourage students to obtain any ancillary competencies or certifications that might make the difference for them when decisions about hiring take place. Career Services and faculty advisers will work closely with students to encourage them to pursue the certifications and competencies that will make them stand out among the crowd of applicants.

For example, business students might be encouraged to obtain a real estate license, appraisal certifications, insurance certifications, sales training coursework, chartered financial analyst (CFA) coursework, investment fund participation, or capital markets coursework. Pre-Health Career students might be encouraged to get Emergency Medical Technician (EMT) certification. Prospective teachers, lawyers, ministers and others may benefit from additional training or certification, as deemed appropriate by their faculty advisers and the Career Services Office.

There are three skills that would be valuable for all graduates to have:

- Moderate to advanced competency with Microsoft Excel
- Moderate to advanced competency with Microsoft Word
- Moderate to advanced competency with Microsoft PowerPoint

These are skills that are indispensable in graduate professional school and in most workplace environments. All Austin College graduates—no matter what their major—should have certain minimum competencies in these applications. In addition, each academic program should provide personalized recommendations for their graduates regarding any additional computer skills that would be of value.

5. **Help Students More with Presenting Transferable Skills.** Create systematic ways for students to understand and demonstrate the connection between their curricular/co-curricular experiences and the transferable skills needed for employment or post-graduate study. All Austin College graduates should receive

- training to present all of their marketable skills in their résumé. They should know how to present in a professional manner the curricular and co-curricular experiences that have provided them with a host of marketable skills: critical thinking, leadership, oral communication, written communication, team-building skills, among others. All Austin College students should have the capability to build a personal portfolio which enables them to include all curricular, co-curricular and extracurricular activities in one place in such a way as to more fully explain to prospective employers or other institutions the value of each in terms that are easily understood.
6. **Build on and Improve Strong Pre-professional Advising.** Create a robust plan for supporting each of the pre-professional programs to ensure perpetuation of their strong reputation. 16% of our 2005-2011 graduates entered a professional program (health, law, etc.), indicating a significant and, perhaps, perilous dependence on a single advisor for each program, especially in the health (Pierce) and law (Rohmer) pre-professional programs.
  7. **Centralize Data.** Formulate a plan for centralization of application/acceptance data and for tracking of students after graduation with the aim to provide this information to the campus program advisors. This data will benefit the college's understanding of its strengths and weaknesses, as well as be useful in communicating our graduates' successes to graduate and professional programs.
  8. **Pre-Business Adviser.** An Austin College faculty member should be selected to act as the official Pre-Business Adviser. At present, we have a Pre-Med Adviser, a Pre-Law Adviser, and a Pre-Theology Adviser, and a Pre-Engineering Adviser. It would help our students to be more competitive if a Pre-Business advisor were available to guide them in preparing to enter the workplace or graduate programs in business-related fields.
  9. **Enhance opportunities for meaningful, more intentional co-curricular involvement.** Assess more accurately the perspective of the Austin College co-curricular experience to better understand our students' concerns and motivations as they relate to initial participation, continued participation, and application beyond college. Increase collaboration between the curricular and co-curricular that consistently and intentionally reflects the mission of Austin College and allows for further skill acquisition during out of classroom experiences. Encourage more students to be active participants in organizations and provide the support necessary to foster a continuity of learning environments.
  10. **Inform Wider Communities about the Value of an Austin College Liberal Arts Education.** Further examine and assess the ways in which individual majors and programs prepare students in each of the employer-identified learning outcomes so we can better communicate the value of our degree programs to prospective students, current students, employers, graduate programs, professional schools, and other stakeholder groups. Explore partnerships with regional employers, i.e., AAC&U's Employer-Educator Compact, to educate employers about the links between employer needs and the Austin College curriculum.

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