IT TAKES MORE THAN A MAJOR:

Employer Priorities for College Learning and Student Success

An Online Survey Among Employers Conducted On Behalf Of:

The Association Of American Colleges And Universities

By Hart Research Associates

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From January 9 to 13, 2013, Hart Research Associates conducted an online survey among 318 employers whose organizations have at least 25 employees and report that 25% or more of their new hires hold either an associate degree from a two-year college or a Bachelor's degree from a four-year college. Respondents are executives at private sector and nonprofit organizations, including owners, CEOs, presidents, C-suite level executives, and vice presidents.

This report provides a detailed analysis of employers' priorities for the kinds of learning today's college students need to succeed in today's economy. It also reports on changes in educational and assessment practices that employers recommend.

Overview

Innovation is a priority for employers today.

- Nearly all employers surveyed (95%) say they give hiring preference to college graduates with skills that will enable them to contribute to innovation in the workplace.

- More than nine in ten agree that "innovation is essential" to their organization's continued success.

Employers recognize capacities that cut across majors as critical to a candidate's potential for career success, and they view these skills as more important than a student's choice of undergraduate major.

- Nearly all those surveyed (93%) agree, "a candidate's demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than their undergraduate major."

- More than nine in ten of those surveyed say it is important that those they hire demonstrate ethical judgment and integrity; intercultural skills; and the capacity for continued new learning.

- More than three in four employers say they want colleges to place more emphasis on helping students develop five key learning outcomes, including: critical thinking, complex problem-solving, written and oral communication, and applied knowledge in real-world settings.

- Employers endorse several educational practices as potentially helpful in preparing college students for workplace success. These include practices that require students to a) conduct research and use evidence-based analysis; b) gain in-depth knowledge in the major and analytic, problem solving, and communication skills; and c) apply their learning in real-world settings.
Employers recognize the importance of liberal education and the liberal arts.

- The majority of employers agree that having both field-specific knowledge and skills and a broad range of skills and knowledge is most important for recent college graduates to achieve long-term career success. Few think that having field-specific knowledge and skills alone is what is most needed for individuals' career success.

- Eighty percent of employers agree that, regardless of their major, every college student should acquire broad knowledge in the liberal arts and sciences.

- When read a description of a 21st century liberal education, a large majority of employers recognize its importance; 74% would recommend this kind of education to a young person they know as the best way to prepare for success in today's global economy.

Employers endorse a blended model of liberal and applied learning.

- Across many areas tested, employers strongly endorse educational practices that involve students in active, effortful work—practices including collaborative problem-solving, internships, research, senior projects, and community engagements. Employers consistently rank outcomes and practices that involve application of skills over acquisition of discrete bodies of knowledge. They also strongly endorse practices that require students to demonstrate both acquisition of knowledge and its application.

Employers think that more college graduates have the skills and preparation needed for entry-level positions than for advancement.

- A majority of employers (56%) express satisfaction with the job colleges and universities are doing to prepare graduates for success in the workplace, but more than two in five indicate room for improvement.

- Two in three employers (67%) believe most college graduates have the skills and knowledge they need to succeed in entry-level positions, but only 44% think they have what is required for advancement and promotion to higher levels.

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1 Definition of liberal education provided in this survey: "This approach to a college education provides both broad knowledge in a variety of areas of study and knowledge in a specific major or field of interest. It also helps students develop a sense of social responsibility, as well as intellectual and practical skills that span all areas of study, such as communication, analytical, and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings."
Employers express interest in e-portfolios and partnerships with colleges to ensure college graduates' successful transition to the workplace.

- In addition to a resume or college transcript, more than four in five employers say an electronic portfolio would be useful to them in ensuring that job applicants have the knowledge and skills they need to succeed in their company or organization.

- Notable proportions of business and non-profit leaders say they are already partnering with two-year and four-year colleges to advance the success of college students after graduation, and those who are not express interest in doing so to provide more hands-on learning opportunities and to help college students successfully make the transition from college into the workplace.
Employers are highly focused on innovation as critical to the success of their companies and they report that the challenges their employees face today are more complex and require a broader skill set than in the past. Notably, employers indicate that they prioritize critical thinking, communication, and complex problem-solving skills over a job candidate’s major field of study when making hiring decisions.

Employers point out that both the expectations and challenges their employees face are greater today than in the past. Majorities say their company/organization is asking employees to take on greater responsibilities and to use a broader set of skills (93% total agree; 52% strongly agree) while facing challenges today that are more complex than in the past (91% total agree; 50% strongly agree).

Employers today are highly focused on innovation and are giving priority to hiring employees who can help in this advancement. Fully 92% agree that innovation is essential to their company’s continued success, including 51% who strongly agree. Additionally, 95% of employers agree (57% strongly) that their company "puts a priority on hiring people with the intellectual and interpersonal skills that will help them contribute to innovation in the workplace."

To achieve success at their companies in today’s more complex environment, employers are in broad agreement that a candidate’s demonstrated capacity to think critically, communicate clearly, and solve complex programs is more important than his or her undergraduate field of study (93% total agree; 59% strongly agree).

Consensus among employers is that innovation, critical thinking, and a broad skill set are important for taking on complex challenges in the workplace.
While they may prioritize key skills over a job candidate's field of study, the majority of employers agree that having BOTH field-specific knowledge and skills and a broad range of skills and knowledge is most important for recent college graduates to achieve long-term career success. When asked whether having field-specific knowledge, a broad range of skills, or both is most important to achieving long-term career success, over half (55%) of employers say it is most important to have both. Among employers who chose just one category, more say having a broad range of skills and knowledge is important for career advancement (29%), than say having knowledge and skills that apply to a specific field or position is most important for college graduates' long-term success (16%).

A majority of employers agree that both specific knowledge and a broad range of skills are necessary for advancement and long-term career success.

Which is more important for recent college graduates who want to pursue advancement and long-term career success at your company?

- Having both field-specific knowledge and skills AND a broad range of skills and knowledge: 55%
- Having a range of skills and knowledge that apply to a range of fields or positions: 29%
- Having knowledge and skills that apply to a specific field or position: 16%

Employers' evaluation of two-year and four-year colleges and universities for the job they are doing preparing graduates to succeed and contribute to today's economy suggests that many see room for improvement. They register a greater sense of confidence in college graduates having the skills and knowledge to succeed in entry-level positions than to advance or be promoted within their companies/organizations.

A 56% majority of employers think that higher education is doing an excellent (9%) or good job (47%) in preparing students for success in today's economy, compared with 44% who say the system is doing a fair (40%) or poor job (4%). It is notable that few employers give post-secondary institutions marks of either excellent or poor; most fall somewhere in the middle.

When asked to think about college graduates from both two-year and four-year colleges and universities, two-thirds of employers say that all (14%) or most (53%) graduates who apply to positions within their company/organization have the skills.
to succeed in entry-level positions, compared with one in three (33%) who say about half or fewer are qualified for entry-level positions.

Thinking specifically about the skills and knowledge needed to advance or be promoted within their company, 44% of employers say that all (7%) or most (37%) graduates have what it takes to move beyond the entry-level. Fifty-six percent (56%) of employers say that about half or fewer applicants who apply to positions within their company have the skills and knowledge for advancement.

Two in three employers believe most college graduates have the skills/knowledge to succeed in entry-level positions; they feel fewer graduates have what it takes to advance.

What proportion of applicants for positions at your company in the past few years possess the full set of skills and knowledge needed for this?

- All/most college grads :: About half of college grads :: Only some/every few college grads

Employers point to a variety of types of knowledge and skills as important considerations when hiring, placing the greatest priority on ethics, intercultural skills, and capacity for professional development. While majorities of employers say that all skill and knowledge areas tested are important, they differentiate between those that are very important to the hiring decisions of their company/organization.

Employers place the greatest degree of importance on the following areas:

- **Ethics:** "Demonstrate ethical judgment and integrity" (96% important, including 76% very important)
- **Intercultural Skills:** "Comfortable working with colleagues, customers, and/or clients from diverse cultural backgrounds" (96% important, including 63% very important)
- **Professional Development:** "Demonstrate the capacity for professional development and continued new learning" (94% important, including 61% very important)
Employees value some skills and qualities more than others when hiring.

![Bar chart showing percentages for different skills and qualities.]

While deemed important by majorities of employers, they place a lesser degree of emphasis on the following areas when it comes to hiring:

- **Community Involvement**: "Show an interest in giving back to the communities in which our company or organization is located or those that it serves" (71% important, including 26% very important; 29% just somewhat/not important)

- **Global Knowledge**: "Know about global cultures, histories, values, religions, and social systems" (55% important, including 16% very important; 45% just somewhat/not important)

Majorities of employers believe two-year and four-year colleges and universities should place more emphasis on a variety of key learning outcomes to increase graduates' success in today's global economy. Few say less emphasis should be placed on any of the learning outcomes tested, but employers overall are most likely to believe there is a need to increase the focus on active skills such as critical thinking, complex problem-solving, communication, and applying knowledge to real-world settings.

Employers were asked whether colleges and universities should place more, less, or the same emphasis on 17 different learning outcomes in order to help students succeed in today's global economy. Large majorities believe colleges and universities should place at least the same or greater emphasis on all of these learning outcomes. Of the 17 learning outcomes tested, majorities believe that colleges should place more emphasis on 11 of them, including seven for which more than seven in 10 employers say colleges should increase their focus.
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Employers say the most emphasis should be placed on the following areas:

■ Critical thinking and analytical reasoning (82% more emphasis, 7% less)
■ Complex problem solving and analysis (81% more emphasis, 6% less)
■ Written and oral communication (80% more emphasis, 8% less)
■ The application of knowledge and skills in real-world settings (78% more emphasis, 6% less)
■ The location, organization, and evaluation of information from multiple sources (72% more emphasis, 9% less)
■ Innovation and creativity (71% more emphasis, 9% less)

### Employers Say Colleges Should Place Varying Degrees Of Emphasis On Selected Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>More %</th>
<th>Less %</th>
<th>Same %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical thinking and analytical reasoning skills</td>
<td>82</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>The ability to analyze and solve complex problems</td>
<td>81</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>The ability to effectively communicate orally</td>
<td>80</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>The ability to effectively communicate in writing</td>
<td>80</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>The ability to apply knowledge and skills to real-world settings</td>
<td>78</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>The ability to locate, organize, and evaluate information from multiple sources</td>
<td>72</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>The ability to innovate and be creative</td>
<td>71</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Teamwork skills and the ability to collaborate with others in diverse group settings</td>
<td>67</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>The ability to connect choices and actions to ethical decisions</td>
<td>64</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Knowledge about science and technology</td>
<td>56</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>The ability to work with numbers and understand statistics</td>
<td>55</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>Proficiency in a language other than English</td>
<td>43</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Knowledge about global issues and developments and their implications for the future</td>
<td>40</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>Knowledge about the role of the United States in the world</td>
<td>35</td>
<td>18</td>
<td>47</td>
</tr>
<tr>
<td>Knowledge about cultural diversity in America and other countries</td>
<td>33</td>
<td>22</td>
<td>45</td>
</tr>
<tr>
<td>Civic knowledge, civic participation, and community engagement</td>
<td>30</td>
<td>18</td>
<td>52</td>
</tr>
<tr>
<td>Knowledge about democratic institutions and values</td>
<td>27</td>
<td>20</td>
<td>53</td>
</tr>
</tbody>
</table>

Employers see less need for colleges to heighten their focus on ensuring graduates demonstrate 1) proficiency in a foreign language, 2) knowledge about global issues/developments, 3) knowledge about cultural diversity/the role of the United States in the world, 4) civic knowledge/participation, and 5) an understanding of democratic institutions and values. Rather, majorities of employers would like higher education institutions to maintain their current level of emphasis in these areas.
There is broad agreement among employers that all students, regardless of their chosen field of study, should have educational experiences that teach them about building civic capacity, broad knowledge about the liberal arts and sciences, and cultures outside the United States.

Large majorities of employers agree with each of six tested goals for college. Top among them, 91% of employers agree that all students should have experiences in college that teach them how to solve problems with people whose views are different from their own, including 57% who strongly agree with this statement. Other aims of college learning that earn high levels of agreement include teaching students about ethical issues and public debates important to their field (87% total agree; 43% strongly) and ensuring college students gain experience working with others to solve important problems in their community (86% total agree; 41% strongly).

While employers may not be clamoring for colleges to increase their emphasis on civic learning or in teaching about global issues, they widely agree that all students should receive civic education and learn about cultures outside the U.S. Fully 82% agree (27% strongly) that every student should take classes that build civic capacity, and learning about societies and cultures outside the United States (78% total agree; 26% strongly) is widely valued for all students. Additionally, four in five agree (32% strongly) that all students should acquire broad knowledge in the liberal arts and sciences, regardless of a student's chosen field of study.

Employers are in agreement with a broad set of college learning goals.

- All students should have educational experiences that teach them how to solve problems with people whose views are different from their own - 91%
- All students should learn about ethical issues and public debates important in their field - 87%
- All students should have direct learning experiences working with others to solve problems important in their communities - 86%
- All should take courses that build knowledge, judgment, commitment to communities, and ensure integrity/vitality of democracy - 182%
- All students should acquire broad knowledge in liberal arts and sciences - 80%
- All should learn about societies and cultures outside the U.S. and global issues and developments - 78%
The variation in the proportion of employers who say they strongly agree with these goals for college do reveal some distinctions, however, suggesting the deepest commitment to the top goal of all students learning how to solve problems with people with different views.

Among the ten existing and emerging educational practices tested, employers believe several have the potential to improve the education of today’s college students and prepare graduates to succeed in the workplace.

Employers express the greatest confidence in the following practices to help students succeed beyond graduation. Large majorities believe that colleges that set expectations for students to achieve these learning outcomes will do the most to prepare them for success:

- Develop research questions in their field and evidence-based analyses (83% will help a lot/fair amount)
- Complete a project prior to graduation that demonstrates their acquired knowledge and skills (79% will help a lot/fair amount)
- Complete an internship or community-based field project (78% will help a lot/fair amount)
- Develop the skills to conduct research collaboratively (74% will help a lot/fair amount)
- Acquire hands-on or direct experience with the methods of science (69% will help a lot/fair amount)
- Work through ethical issues and debates to form their own judgments about the issues at stake (66% will help a lot/fair amount)

### Degree To Which Various New Approaches To Learning Have Potential To Help Students Succeed

<table>
<thead>
<tr>
<th>Expectation</th>
<th>Will Help A Lot/Fair Amount</th>
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<tbody>
<tr>
<td>Expecting students to develop the skills to research questions in their field and develop evidence-based analyses</td>
<td>83</td>
</tr>
<tr>
<td>Expecting students to complete a significant project before graduation that demonstrates their depth of knowledge in their major AND their acquisition of analytical, problem-solving, and communication skills</td>
<td>79</td>
</tr>
<tr>
<td>Expecting students to complete an internship or community-based field project to connect classroom learning with real-world experiences</td>
<td>78</td>
</tr>
<tr>
<td>Expecting students to develop the skills to conduct research collaboratively with their peers</td>
<td>74</td>
</tr>
<tr>
<td>Expecting students to acquire hands-on or direct experience with the methods of science so they will understand how scientific knowledge is developed</td>
<td>69</td>
</tr>
<tr>
<td>Expecting students to work through ethical issues and debates to form their own judgments about the issues at stake</td>
<td>66</td>
</tr>
</tbody>
</table>
A flipped classroom approach to learning also has broad appeal among employers. Three in five (59%) say an approach that deemphasizes lectures and devotes classroom time to dialogue, debate, and problem solving in groups or alone with the guidance of the instructor will help prepare students a lot or a fair amount for success beyond graduation.

Employers anticipate that other emerging educational practices would have a more muted impact in preparing students for success: expecting students to learn about points of view of people in societies outside of North America and Western Europe (47% a lot or fair amount), expecting them to learn about cultural and ethnic diversity in the context of the United States (44% a lot or fair amount), and expecting them to explore various challenges facing society (42% a lot or fair amount).

**In addition to a résumé and college transcript, a large majority of employers say an electronic portfolio demonstrating a student's work and key skill and knowledge areas would be useful in evaluating potential candidates for hire.** Four in five (83%) employers say an electronic portfolio of student accomplishments would be very (43%) or fairly (40%) useful to them in ensuring applicants have the skills and knowledge to succeed in their company or organization. Just 17% say the portfolio would be only somewhat useful or less.

A notable proportion of employers say their company or organization currently partners with a nearby college or university to offer internships to college students. Smaller proportions of employers report partnering with higher education institutions in other ways tested, but express interest in doing so in the future.

When it comes to partnering with two-year and four-year colleges to advance the success of college students after graduation, employers are most likely to say their company or organization offers internships and/or apprenticeships to students at nearby institutions (47% currently do this). An additional 42% of employers say
they have a high (21%) or medium (21%) level of interest in developing this type of program in the future. Only 11% say they would have a low level of interest.

Other collaborative efforts between colleges and companies/organizations are less common among employers today; nevertheless, majorities of employers express interest in these initiatives:

- Working closely with the career services office of a nearby college to help students successfully make the transition from college into the workplace (26% currently do this; 51% do not currently do this, but would have a high/medium level of interest in doing so in the future).
- Partnering with colleges in the area to better align the curriculum and learning outcomes they teach to the skills and knowledge our company looks for in new hires (22% currently do this; 54% do not currently do this, but would have a high/medium level of interest in doing so in the future).
- Sponsoring a program at a nearby college to get students involved in more "real-world" or hands-on learning while they are still in college (18% currently do this; 53% do not currently do this, but would have a high/medium level of interest in doing so in the future).

Across several areas tested, employers strongly endorse educational practices that involve students in active, effortful work—practices that involve such things as collaborative problem-solving, research, senior projects, community engagement, and internships.

Questions that ask employers about specific areas of "knowledge" with no reference to active learning or skill development receive lower scores than questions that address cross-cutting skills, or questions that address a combination of knowledge and skills. Even where employers considered particular kinds of knowledge very important or somewhat important (e.g. global knowledge, science and technology), they still place a higher priority on forms of learning that emphasize students’ active development and application of intellectual and practical skills.

- More than nine in ten of those surveyed say it is important that those they hire demonstrate ethical judgment and integrity; intercultural skills; and the capacity for continued new learning.
- More than 75% of employers say they want colleges to place more emphasis on helping students develop five key learning outcomes, including: critical thinking, complex problem-solving, written and oral communication, and applied knowledge in real-world settings.
- In contrast, no more than 40% of employers indicate a desire for colleges to place more emphasis on helping students gain knowledge in areas including global issues, the role of the United States in the world, cultural diversity in America, civics, or democratic institutions and values. (Majorities would rather that colleges maintain their current level of emphasis on these knowledge areas.) The only knowledge area in which more than half of employers would like to see colleges place more emphasis is on knowledge...
about science and technology (56% more emphasis), but it is still a lower priority than active, effortful learning and skills development.

- Employers endorse several educational practices as potentially helpful in preparing college students for workplace success. These include practices that require students to a) conduct research and use evidence-based analysis; b) gain in-depth knowledge in the major and analytic, problem solving, and communication skills; and c) apply their learning in real-world settings.

Employers recognize the importance of today’s colleges and universities providing a liberal education—one that focuses on both broad knowledge in a variety of areas and knowledge in a specific field of interest, as well as intellectual and practical skills that span all areas of study and a sense of social responsibility. When given a description of the component elements of a liberal education, nearly all consider this kind of learning very or fairly important for colleges to provide, and the large majority would recommend this approach to young people they know.

- When presented with a description of liberal education (see full description in corresponding graph), fully 94% of employers say it is important for today’s colleges to provide this type of education, including half (51%) who say it is very important to do so.

Employers endorse the concept of a liberal education.

*How important is it for today’s colleges to provide this type of education?*

"This approach to a college education provides both broad knowledge in a variety of areas of study and knowledge in a specific major or field of interest. It also helps students develop a sense of social responsibility, as well as intellectual and practical skills that span all areas of study, such as communication, analytical, and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings."
Moreover, nearly three in four employers (74%) say they would recommend that their own child or a young person they know pursue this type of education in order to achieve professional and career success in today's global economy. Just 7% would not recommend this approach, and 19% say it depends. When forced to choose one way or the other (and without the "depends" option), fully 89% would recommend the described approach to a young person seeking advice on the type of college education they should pursue and only 11% would not.

Three in four would recommend the concept of a liberal education to their own child or a young person they know.

If you were advising your child or a young person you know about the type of college education they should seek to achieve in order to achieve professional and career success in today’s global economy, would you recommend they pursue an education like the one described below?

"This approach to a college education provides both broad knowledge in a variety of areas of study and knowledge in a specific major or field of interest. It also helps students develop a sense of social responsibility, as well as intellectual and practical skills that span all areas of study, such as communication, analytical, and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings."