

# **Ivory Tower or Job Training? What are the Key Roles of Colleges and Universities in Preparing Learners for 21st Century Workforce Realities?**

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*Association  
of American  
Colleges and  
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# Percentage of Employers Who Want Colleges to “Place More Emphasis” on Essential Learning Outcomes



## ★ Knowledge of Human Cultures and the Physical and Natural World

• Science and technology	70%
• Global issues	67%*
• The role of the United States in the world	57%
• Cultural diversity in the United States and other countries	57%
• Civic knowledge, participation, and engagement	52%*

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## ★ Intellectual and Practical Skills

• Written and oral communication	89%
• Critical thinking and analytic reasoning	81%
• Complex problem solving	75%
• Teamwork skills in diverse groups	71%*
• Creativity and innovation	70%
• Information literacy	68%
• Quantitative reasoning	63%

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## ★ Personal and Social Responsibility

• Ethical decision making	75%
• Intercultural competence (teamwork in diverse groups)	71%*
• Intercultural knowledge (global issues)	67%*
• Civic knowledge, participation, and engagement	52%*

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## ★ Integrative and Applied Learning

• Applied knowledge in real-world settings	79%
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Note: These findings are taken from *Raising the Bar: Employers’ Views on College Learning in the Wake of the Economic Downturn*, a survey of employers conducted for AAC&U by Hart Research Associates and published in 2010. For a full report on this survey and related employer findings, see [www.aacu.org/leap](http://www.aacu.org/leap).

\*Starred items are shown in multiple learning outcome categories because they apply to more than one.

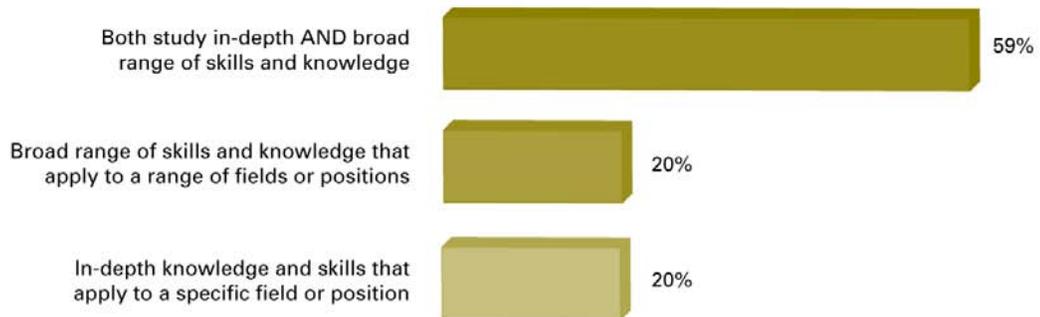
### FIGURE 3: EMPLOYERS' EXPECTATIONS OF EMPLOYEES HAVE INCREASED

Percent who agree with each statement



### FIGURE 5: BROAD SKILLS/KNOWLEDGE AND SPECIFIC SKILLS/KNOWLEDGE ARE NEEDED FOR CAREER SUCCESS

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



Note: These figures are based on *Raising the Bar* (see more on page 2).

# AAC&U Member Institutions’ Learning Outcomes for All Students



## ★ Knowledge of Human Cultures and the Physical and Natural World

• Humanities	92%
• Sciences	91%
• Social Sciences	90%
• Global/World Cultures	87%
• Mathematics	87%
• Diversity in the United States	73%
• United States History	49%
• Languages Other Than English	42%
• Sustainability	24%

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## ★ Intellectual and Practical Skills

• Writing skills	99%
• Critical Thinking	95%
• Quantitative Reasoning	91%
• Oral Communication	88%
• Intercultural Skills	79%*
• Information Literacy	76%
• Research skills	65%

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## ★ Personal and Social Responsibility

• Intercultural Skills	79%*
• Ethical Reasoning	75%
• Civic Engagement	68%

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## ★ Integrative Learning

• Application of Learning	66%
• Integration of Learning	63%

Note: Nearly 80% of AAC&U member institutions surveyed reported that they had a common set of learning outcomes for all students. Percentages cited above are the percentage of those with campus-wide goals reporting that this outcome is one of the learning goals they have for all students. This data was generated as part of AAC&U’s initiative, Liberal Education and America’s Promise (LEAP). The four categories of learning outcomes correspond to a set of “Essential Learning Outcomes” developed as part of LEAP. See [www.aacu.org/leap](http://www.aacu.org/leap) and *Learning and Assessment: Trends in Undergraduate Education—A Survey Among Members of the Association of American Colleges and Universities* (AAC&U and Hart Research Associates, 2009).

\* The starred items are shown in two learning outcome categories because they apply to both.

## CUNY New Community College Institutional Student Learning Outcomes

The New Community College’s learning outcomes encourage students to aim high and provide them with a framework for their entire educational experience, connecting school, college, work and life. **These outcomes build on Lumina Foundation’s Degree Qualifications Profile** and are informed by AAC&U’s LEAP Essential Learning Outcomes. They are an inclusive framework for a contemporary liberal education, defined not as a selected set of disciplines, but as a set of knowledge and skills for all aspects of life: school, work, citizenship, and social responsibility. They are reflective of the NCC’s mission and values.

Students will know from the time they enter the NCC that they will be expected to demonstrate progress in achieving these outcomes in the context of their chosen fields of study. Institutional learning outcomes will be addressed at the course and program level. They will be based on learning in and beyond the classroom and will be assessed via students’ coursework as collected and presented in their e-portfolios.

1. Broad, Integrative Knowledge: General Education	2. Specialized Knowledge: The Majors	3. Intellectual Skills for Life-Long Learning	4. Civic Learning, Engagement & Social Responsibility	5. Applied Learning
<p><i>The outcomes in this category demonstrate that students can integrate learning from broad fields of general study and make sense of the connections between different academic disciplines and multiple perspectives.</i></p>	<p><i>The purpose of a major is to provide students with specialized knowledge. Students who achieve the learning outcomes in this category will understand basic concepts, vocabulary and research methods related to their major, which will prepare them to enter the workforce and/or continue their studies at the baccalaureate level.</i></p>	<p><i>The communication, quantitative and critical thinking skills included in this category are necessary to engage in learning throughout life in personal, academic, and professional contexts. These competencies will enable students to pursue their interests and questions about the world by accessing, understanding and using knowledge and information.</i></p>	<p><i>This category describes the knowledge and skills a student should have and demonstrate in response to diverse social, environmental and economic challenges at local, national and global levels.</i></p>	<p><i>The outcomes in this category describe what students can do with what they know, demonstrated by how they address problems in school and in non-classroom settings, including at work. They include applications of learning from the classroom and of skills developed from participation in activities outside the classroom.</i></p>
<ul style="list-style-type: none"> <li>a. Demonstrates engagement with issues that have contemporary, historical, scientific, economic, technological, or artistic significance.</li> <li>b. Exhibits an understanding of how different disciplines create new knowledge and their approaches to solving problems.</li> <li>c. Describes multiple perspectives on key debates and discusses the importance of these debates to society.</li> <li>d. Connects ideas and concepts across different courses, majors, and forms of experiential learning.</li> <li>e. Expresses curiosity about the essential questions that drive personal, academic, and professional inquiry.</li> </ul>	<ul style="list-style-type: none"> <li>a. Recognizes the scope and principal features of the field of study, including its main theories and practices.</li> <li>b. Understands and uses contemporary vocabulary specific to the field of study.</li> <li>c. Connects content and concepts of “specialized knowledge” to ideas studied in the City Seminars, Ethnographies of Work and other NCC General Education courses.</li> <li>d. Demonstrates knowledge of problem-solving techniques and the ability to form hypotheses for research purposes.</li> </ul>	<ul style="list-style-type: none"> <li>a. Demonstrates the ability to analyze ideas, theories and/or issues by breaking them down, identifying the component elements and explaining how they relate.</li> <li>b. Communicates effectively using substantially error-free language in oral and written formats.</li> <li>c. Presents accurate mathematical calculations and operations, and explains how they are used to solve problems and to interpret data.</li> <li>d. Utilizes both quantitative and qualitative data to explore and understand important issues.</li> <li>e. Locates, evaluates and cites multiple information resources in projects, papers or presentations.</li> <li>f. Displays ability to assess own work and to estimate its relative value.</li> </ul>	<ul style="list-style-type: none"> <li>a. Identifies and explains his or her own civic and cultural background, including its origins, development and assumptions.</li> <li>b. Exhibits knowledge of and respect for diversity and cross-cultural perspectives and demonstrates how they influence interpretations of key problems in politics, society or the arts.</li> <li>c. Describes various historical and contemporary positions on selected democratic values or practices, and presents his or her position on specific problems.</li> <li>d. Takes an active role in a community context (work, service, co-curricular activities, etc.), and examines the civic issues encountered and the insights gained from the community experience.</li> <li>e. Demonstrates integrity, honesty and ethical reasoning in academic and professional contexts.</li> </ul>	<ul style="list-style-type: none"> <li>a. Uses creativity, content knowledge, research and analytical skills to provide solutions to real- world problems.</li> <li>b. Collaborates with others to solve problems and complete projects.</li> </ul>

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## Employer Views on College Learning (A Sampler)

“We need more big picture thinking in the professional fields and more real-world applications in the liberal arts and sciences.”

*Stephen Weiss  
Senior Portfolio Manager, Neuberger Berman, LLC*

“My company lives and dies on our ability to innovate and to create the new products and processes that give us an edge in this very competitive global economy. ESCO needs people who have both a command of certain specific skills and robust problem-solving and communication skills.”

*Steven Pratt  
CEO, ESCO Corporation, Chair of Oregon Business Council,  
participant in Portland, Oregon LEAP Public Forum*

“Employers do not want, and have not advocated for, students prepared for narrow workforce specialties....Virtually all occupational endeavors require a working appreciation of the historical, cultural, ethical, and global environments that surround the application of skilled work.”

*Roberts T. Jones  
President, Education Workforce Policy, LLC,  
member of LEAP National Leadership Council*

“Intel Corp. Chairman Craig Barrett has said that 90 percent of the products his company delivers on the final day of each year did not exist on the first day of the same year. To succeed in that kind of marketplace, U.S. firms need employees who are flexible, knowledgeable, and scientifically and mathematically literate.”

*Norman R. Augustine  
Retired Chairman and CEO, Lockheed Martin Corporation*

“[Business leaders are] frustrated with their inability to find ‘360 degree people’...”

*Findings from 2006 focus groups among business executives  
Peter D. Hart Research Associates*

“Business leaders...are much more frustrated with recent graduates’ deficiencies in more general skills and abilities.”

*“Report of Findings Based on Focus Groups Among Business Executives”  
(AAC&U, 2006)*

“I mean, they learn the book knowledge. It’s all theory. It’s not actual practice. And I do believe we need more practice.”

*Atlanta Business Executive, quoted in “Report of Findings Based on Focus Groups Among  
Business Executives” (AAC&U, 2006)*