

In a 2004 report “Taking Responsibility for the Quality of the Baccalaureate Degree,” the Association of American Colleges and Universities (AAC&U) published a table of desired student learning outcomes of college. The table was drawn together from a variety of sources: the standards of regional and specialized accreditation agencies from across the country, from best practices articulated by educational associations, from qualities sought by employers, and from contributions of faculty and administrators at various colleges and universities. ***The table demonstrates a widespread and growing consensus throughout American higher education regarding the desired learning outcomes of an undergraduate education.*** They include:

- ◆ Strong analytic, communication, quantitative, and information skills
- ◆ Deep understanding and hands-on experience with the disciplines that explore the natural, social, and cultural realms
- ◆ Intercultural knowledge and collaborative problem-solving skills
- ◆ Civic, social, and personal responsibility
- ◆ Integrative thinking and the ability to transfer knowledge from one setting to another

Campus professionals are launching this year a discussion of the characteristics of our graduates. Our discussion has just begun, but this table provides a starting point for programs to use in their assessment efforts.

GROWING CONSENSUS ON IMPORTANT LEARNING OUTCOMES OF COLLEGE

	SKILLS	INQUIRY/ANALYSIS	INTEGRATION
Specialized accreditor: AACSB (Business)	<ul style="list-style-type: none"> ◆ Communication abilities 	<ul style="list-style-type: none"> ◆ Analytic skills ◆ Reflective thinking skills 	<ul style="list-style-type: none"> ◆ Use of information technology
Specialized accreditor: ABET (Engin./Tech.)	<ul style="list-style-type: none"> ◆ Ability to communicate effectively 	<ul style="list-style-type: none"> ◆ Ability to design/conduct scientific experiments ◆ Ability to analyze and interpret data ◆ Ability to identify, formulate, and solve engineering problems 	<ul style="list-style-type: none"> ◆ Ability to design a system, component, or process to meet desired needs
Specialized accreditor: CCNE/AACN (Nursing)	<ul style="list-style-type: none"> ◆ Communicating effectively in a variety of written and spoken formats 	<ul style="list-style-type: none"> ◆ Thinking critically ◆ Developing higher order problem-solving and critical thinking skills ◆ Interpreting and using quantitative data 	<ul style="list-style-type: none"> ◆ Integrating concepts from behavioral, biological and natural sciences in order to understand self and others
Regional accreditor: WASC	<ul style="list-style-type: none"> ◆ College-level written and oral communication 	<ul style="list-style-type: none"> ◆ College-level quantitative skills ◆ Habit of critical analysis of data and argument 	<ul style="list-style-type: none"> ◆ Information literacy
Regional accreditor: Middle States Assn	<ul style="list-style-type: none"> ◆ Oral and written communication 	<ul style="list-style-type: none"> ◆ Critical analysis and reasoning ◆ Scientific and quantitative reasoning 	<ul style="list-style-type: none"> ◆ Information literacy ◆ Technological competency
Scholarly analysis: Schneider/Shoenberg, <i>Contemporary Understandings</i>	<ul style="list-style-type: none"> ◆ Writing ◆ Oral expression ◆ Second language 	<ul style="list-style-type: none"> ◆ Quantitative reasoning ◆ Understanding multiple modes of inquiry 	<ul style="list-style-type: none"> ◆ Technological literacy ◆ Integrative learning: <ul style="list-style-type: none"> ◆ Within majors, ◆ Across fields, ◆ Between general studies and majors, ◆ In and out of school
Scholarly analysis: AAC&U <i>Greater Expectations</i>	<ul style="list-style-type: none"> ◆ Communicating in diverse settings and groups, using written, oral, and visual means, and in more than one language 	<ul style="list-style-type: none"> ◆ Deriving meaning from experience, as well as gathering information from observation ◆ Understanding and employing both quantitative and qualitative analysis to describe and solve problems 	<ul style="list-style-type: none"> ◆ Interpreting, evaluating and using information discerningly from a variety of sources ◆ Integrating knowledge of various types and understanding complex systems ◆ Resolving difficult issues creatively by employing multiple systems and tools
Industry employer Boeing Corp	<ul style="list-style-type: none"> ◆ Good communication skills: <ul style="list-style-type: none"> ◆ Written ◆ Verbal ◆ Graphic ◆ Listening 	<ul style="list-style-type: none"> ◆ Ability to think both critically and creatively <ul style="list-style-type: none"> ◆ Independently ◆ Cooperatively 	<ul style="list-style-type: none"> ◆ Understanding the contexts in which engineering is practiced: <ul style="list-style-type: none"> ◆ Economics ◆ History ◆ The environment ◆ Customer and societal needs
Higher education leaders: Project on Accred/Assessment	<ul style="list-style-type: none"> ◆ Speaking/Listening ◆ Writing/Reading ◆ Visual ◆ Artistic 	<ul style="list-style-type: none"> ◆ Qualitative and quantitative reasoning ◆ Critical thinking ◆ Scientific reasoning ◆ Intellectual creativity 	<ul style="list-style-type: none"> ◆ Information literacy ◆ Ability to apply knowledge appropriately ◆ Systematic thinking

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	COMMUNITY/ CITIZENSHIP	ETHICS/ VALUES	GLOBAL/ MULTICULTURAL
Specialized accreditor: AACSB (Business)	◆ Knowledge and skills in ethical and legal responsibilities in organizations and society	◆ Ethical understanding and reasoning abilities	◆ Multicultural and diversity understanding
Specialized accreditor: ABET (Engin./Tech.)	◆ Knowledge of contemporary issues	◆ Understanding professional and ethical responsibility	◆ Understanding the impact of engineering solutions in a global and societal context
Specialized accreditor: CCNE/AACN (Nursing)	◆ Applying knowledge regarding social, political, economic, and historical issues to the analysis of societal and professional problems	◆ Understanding the nature of human values ◆ Developing and articulating personal standards against which to measure new ideas and experiences	◆ Appreciating cultural differences and bridging cultural and linguistic barriers
Regional accreditor: WASC	◆ Appreciating civic responsibility	◆	◆ Appreciating diversity
Regional accreditor: Middle States Assn	◆	◆ Appreciation of values, ethics, and diverse perspectives	◆ Expanded cultural and global awareness and sensitivity
Scholarly analysis: Schneider/Shoenberg, <i>Contemporary Understandings</i>	◆ Societal and civic knowledge	◆ Moral reasoning ◆ Self-knowledge and grounded values	◆ Global knowledge
Scholarly analysis: AAC&U <i>Greater Expectations</i>	◆ Actively participating as a citizen of a diverse democracy	◆ Transforming information into knowledge and knowledge into judgment and action ◆ Responsibility for society's moral health and for social justice ◆ Discerning consequences, including ethical consequences, of decisions and actions	◆ Respecting the complex identities of others, their histories, and their cultures ◆ Understanding the human imagination, expression, and the products of many cultures ◆ Appreciating the interrelations within and among the global and cross-cultural communities
Industry employer Boeing Corp	◆	◆ High ethical standards	◆
Higher education leaders: Project on Accred/Assessment	◆	◆ Proficiency in dealing with personal values and responsibilities	◆ Proficiencies and capacities in dealing with a diverse society ◆ Communication across cultural and linguistic barriers

GROWING CONSENSUS OF IMPORTANT LEARNING OUTCOMES OF COLLEGE			
	PERSONAL DEVELOPMENT	BREADTH OF KNOWLEDGE	LIFELONG LEARNING
Specialized accreditor: AACSB (Business)	◆ Group and individual dynamics in organizations	◆	◆
Specialized accreditor: ABET (Engin./Tech.)	◆ Ability to function on multidisciplinary teams	◆	◆ Recognizing the need for, and ability to engage in lifelong learning
Specialized accreditor: CCNE/AACN (Nursing)	◆ Engaging in effective working relationships	◆ The arts, sciences and humanities as a forum for the study of values, ethical principles, and the physical world	◆ Embrace lifelong learning
Regional accreditor: WASC	◆ Ability to work with others	◆ Cultural and aesthetic breadth ◆ Social and political breadth ◆ Scientific and technical knowledge	◆ Capability to engage in lifelong learning
Regional accreditor: Middle States Assn	◆	◆	◆ Pursuit of lifelong learning
Scholarly analysis: Schneider/Shoenberg, <i>Contemporary Understandings</i>	◆ Negotiating difference	◆ Knowledge in humanities, arts, sciences and social sciences	◆ Preparation of lifelong learning
Scholarly analysis: AAC&U <i>Greater Expectations</i>	◆ Intellectual agility ◆ Managing change ◆ Respecting and appropriately using intuition and feeling ◆ Understanding one's self and one's multiple identities that connect habits of mind, heart, and body	◆ Modeling the natural, social, and technical worlds	◆ Engaging in ongoing learning
Industry employer Boeing Corp	◆ Flexibility and the self-confidence to adapt to rapid/major change ◆ Profound understanding of the commitment to teamwork	◆	◆ Curiosity and a desire to learn for life
Higher education leaders: Project on Accred/Assessment	◆ Ability to be resourceful, flexible, and adaptable ◆ Self-understanding and assessment ◆ Ability to deal with individuals, groups, and organizations	◆ Proficiencies and capacities in dealing with the natural world ◆ Aesthetic appreciation ◆ Historical perspective	◆ Lifelong learning

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	SPECIFICALLY RELATED TO A FIELD
Specialized accreditor: AACSB (Business)	<ul style="list-style-type: none"> ◆ Statistical data analysis and management science as they support decision-making processes throughout an organization ◆ Domestic and global economic environments of organizations
Specialized accreditor: ABET (Engin./Tech.)	<ul style="list-style-type: none"> ◆ Ability to apply knowledge of mathematics, science, and engineering ◆ Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
Specialized accreditor: CCNE/AACN (Nursing)	<ul style="list-style-type: none"> ◆ Technical skills ◆ Using the scientific process and scientific data as a basis for developing, implementing, and evaluating nursing interventions ◆ Appreciation for and understanding of the character of professions
Regional accreditor: WASC	<ul style="list-style-type: none"> ◆ Engaging in an in-depth, focused, and sustained program of study
Regional accreditor: Middle States Assn	<ul style="list-style-type: none"> ◆
Scholarly analysis: Schneider/Shoenberg, <i>Contemporary Understandings</i>	<ul style="list-style-type: none"> ◆ Inquiry-based learning in the major
Scholarly analysis: AAC&U <i>Greater Expectations</i>	<ul style="list-style-type: none"> ◆
Industry employer Boeing Corp	<ul style="list-style-type: none"> ◆ Good understanding of engineering science fundamentals: <ul style="list-style-type: none"> ◆ Mathematics (including statistics) ◆ Physical and life sciences ◆ Information technology ◆ Good understanding of design and manufacturing processes
Higher education leaders: Project on Accred/Assessment	<ul style="list-style-type: none"> ◆