Give Students a Compass: Inclusive Excellence, General Education, and Student Success

Give Students a Compass: A California Convening of Educators and Grantmakers

November 4, 2009

Carol Geary Schneider
Changing Designs for College Learning

The Nineteenth Century College

A Common Core Curriculum
(All learning is “general and liberal education”)

The Twentieth Century University

Breadth + Depth
(Breadth = General Studies; Depth = Majors; “liberal education” becomes synonymous with “general education”)
Changing Designs for College Learning

The Twenty-First Century Academy

A Curriculum in Transition:
Rethinking educational purposes and practices to better prepare students for

• global interdependence
• innovation in the workplace
• diverse democracy

Association of American Colleges and Universities
2000-2005 – Greater Expectations –
A National Dialogue About Goals for College Learning

2005-2015 – Liberal Education and America’s Promise (LEAP)
★ Campus Action
★ Public Advocacy
★ Useful Evidence
Preparing Students for Complexity and Change

The Essential Learning Outcomes

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative and Applied Learning
Four State Systems are Using Local Versions of the LEAP Essential Learning Outcomes

- California State University
- University of Wisconsin System
- Oregon University System
- Utah System of Higher Education (announced 10/29)
Employers Strongly Endorse the Essential Learning Outcomes – And They Urge New Effort to Help All Students Achieve Them
If These Are the Goals, How Do We Help Today’s Students Achieve Them?
Give Students a Compass –
With HIPs

- Aims/Outcomes Guide Curriculum Design
- High Impact Practices (HIPs) Help Students Achieve Outcomes
- Milestone/Capstone Assessments Show What Students Can Do
High Impact Practices:
What They Are, Who Has Access to Them, and Why They Matter

by George D. Kuh

High Impact Practices

- First-Year Seminars and Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing-Intensive Courses
- Collaborative Assignments and Projects
- “Science as Science Is Done”/Undergraduate Research
- Diversity/Global Learning
- Service Learning, Community-Based Learning
- Internships
- Capstone Courses and Projects
Impact of Educationally Purposeful Practices on First Academic Year GPA by Pre-College Achievement Level

Impact of Educationally Purposeful Practices on First Academic Year GPA by Race/Ethnicity

Impact of Educationally Purposeful Practices on the Probability of Returning for the Second Year of College by Race

Outcomes of High Impact Practices for Underserved Students: A Review of the Literature

Lynn Swaner and Jayne Brownell
(Forthcoming AAC&U report, 2009)
The Good News

High Impact Practices Do Foster Gains on Essential Learning Outcomes

The Compass Project

★ Redesigning general education
★ Incorporating five high impact practices
  – First year seminars and experiences
  – Learning communities
  – Service learning
  – Undergraduate Research
  – Capstone projects
★ Making Excellence Inclusive
Implications for General Education & Transfer

★ Courses are mapped to outcomes
  – It takes more than one course
★ High impact practices deepen learning;
  – Yield evidence on student progress
Implications for General Education & Transfer (cont.)

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

★ Articulation Systems Will Need to Address:
  – Competency and Progress Toward Outcomes; Not Course Categories Alone

★ Advising and Coaching Will Be Absolutely Essential
At the Dawn of the Industrial Age, the Curriculum Changed Fundamentally to Meet New Expectations
The New Global Century Now Challenges Us to Meet New Expectations Once Again
“As we respond to a changing world, we can—and we must—provide every student with a liberal education—not just some of them.”
Give Students a Compass:
Inclusive Excellence, General Education, & Student Success

Give Students a Compass:
A California Convening for Educators and Grantmakers
November 4, 2009

Carol Geary Schneider
Association of American Colleges and Universities

A liberal education provides both broad knowledge in a variety of areas of study and more in-depth 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. General education is the part of a liberal education curriculum shared by all students. It provides broad exposure to multiple disciplines and forms the basis for developing important intellectual, civic and practical capacities. General education can take many forms, and increasingly includes introductory, advanced, and integrative forms of learning.
CHANGING FRAMEWORKS FOR KNOWLEDGE & KNOWING

Unity ↔ Multiplicity
Western ↔ Plural/Global
Universalizing ↔ Situated
Discovered ↔ Constructed
Area-based ↔ Intercultural
Detached ↔ Relational
Abstract ↔ Experiential
Value-neutral ↔ Values inquiry
Individual ↔ Collaborative
Analytical ↔ Applied/Civic
# Changing Educational Practices

<table>
<thead>
<tr>
<th>Established</th>
<th>Modified</th>
<th>Emerging</th>
</tr>
</thead>
<tbody>
<tr>
<td>focuses on teaching</td>
<td>in recognition that what is taught is not always what is learned</td>
<td>ALSO focuses on learning</td>
</tr>
<tr>
<td>emphasizes what an educated person should know</td>
<td>in recognition of the explosion of available information</td>
<td>ALSO emphasizes how to find and evaluate needed information and what students can do with their knowledge</td>
</tr>
<tr>
<td>sees the curriculum predominantly as a conveyor of well-established knowledge</td>
<td>in recognition of the world’s complexity</td>
<td>ALSO interprets education as an informed probing of questions, values, and choices</td>
</tr>
<tr>
<td>assumes a relatively homogeneous group of students</td>
<td>given diversity as a social reality</td>
<td>engages diversity as a resource for learning</td>
</tr>
<tr>
<td>emphasizes study in a discipline</td>
<td>in recognition of the multidisciplinary approach needed to understand real-world problems</td>
<td>ALSO seeks connections within and across disciplines</td>
</tr>
<tr>
<td>emphasizes individual work</td>
<td>given the need to work as members of teams in the workplace and in community life</td>
<td>ALSO values collaborative work, particularly in diverse groups</td>
</tr>
<tr>
<td>stresses critical thinking</td>
<td>given the need for civic engagement in major policy decisions</td>
<td>ALSO links critical thinking to real-life problems, often involving contested values</td>
</tr>
<tr>
<td>promotes objective analysis and scholarly research</td>
<td>in recognition of the need to shape the rapid pace of change</td>
<td>ALSO develops creativity by valuing innovation and active problem-solving</td>
</tr>
<tr>
<td>studies majority Western cultures, perspectives, and issues</td>
<td>to respond to the plurality of the modern world, worldwide problems, and interdependence</td>
<td>ALSO examines and engages with a range of cultures, cultural complexity, and global issues</td>
</tr>
<tr>
<td>values learning for learning’s sake</td>
<td>to acknowledge the new role of higher education in U.S. society</td>
<td>ALSO celebrates practical knowledge</td>
</tr>
<tr>
<td>considers higher education in isolation from primary and secondary education</td>
<td>given the need to build an aligned system to reach greater expectations</td>
<td>sees college learning as a part of a continuum with, and dependent on, the K-12 learning environment</td>
</tr>
</tbody>
</table>

Adapted from: Greater Expectations: A New Vision for Learning as a Nation Goes to College (Association of American Colleges & Universities, 2002)
The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

★ Knowledge of Human Cultures and the Physical and Natural World
  • Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts
  *Focused by engagement with big questions, both contemporary and enduring*

★ Intellectual and Practical Skills, including
  • Inquiry and analysis
  • Critical and creative thinking
  • Written and oral communication
  • Quantitative literacy
  • Information literacy
  • Teamwork and problem solving
  *Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance*

★ Personal and Social Responsibility, including
  • Civic knowledge and engagement—local and global
  • Intercultural knowledge and competence
  • Ethical reasoning and action
  • Foundations and skills for lifelong learning
  *Anchored through active involvement with diverse communities and real-world challenges*

★ Integrative and Applied Learning, including
  • Synthesis and advanced accomplishment across general and specialized studies
  *Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems*

Note: This listing was developed through a multiyear dialogue with hundreds of colleges and universities about needed goals for student learning; analysis of a long series of recommendations and reports from the business community; and analysis of the accreditation requirements for engineering, business, nursing, and teacher education. The findings are documented in previous publications of the Association of American Colleges and Universities: Greater Expectations: A New Vision for Learning as a Nation Goes to College (2002), Taking Responsibility for the Quality of the Baccalaureate Degree (2004), and Liberal Education Outcomes: A Preliminary Report on Achievement in College (2005). Liberal Education Outcomes is available online at www.aacu.org/leap.
Percentage of Employers Who Want Colleges to “Place More Emphasis” on Essential Learning Outcomes

<table>
<thead>
<tr>
<th>Knowledge of Human Cultures and the Physical and Natural World</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Science and technology</td>
<td>82%</td>
</tr>
<tr>
<td>• Global issues</td>
<td>72%*</td>
</tr>
<tr>
<td>• The role of the United States in the world</td>
<td>60%</td>
</tr>
<tr>
<td>• Cultural values and traditions (U.S./global)</td>
<td>53%*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intellectual and Practical Skills</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teamwork skills in diverse groups</td>
<td>76%*</td>
</tr>
<tr>
<td>• Critical thinking and analytic reasoning</td>
<td>73%</td>
</tr>
<tr>
<td>• Written and oral communication</td>
<td>73%</td>
</tr>
<tr>
<td>• Information literacy</td>
<td>70%</td>
</tr>
<tr>
<td>• Creativity and innovation</td>
<td>70%</td>
</tr>
<tr>
<td>• Complex problem solving</td>
<td>64%</td>
</tr>
<tr>
<td>• Quantitative reasoning</td>
<td>60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal and Social Responsibility</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Intercultural competence (teamwork in diverse groups)</td>
<td>76%*</td>
</tr>
<tr>
<td>• Intercultural knowledge (global issues)</td>
<td>72%*</td>
</tr>
<tr>
<td>• Ethics and values</td>
<td>56%</td>
</tr>
<tr>
<td>• Cultural values/traditions—U.S./global</td>
<td>53%*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrative and Applied Learning</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Applied knowledge in real-world settings</td>
<td>73%</td>
</tr>
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</table>

Note: These findings are taken from a survey of employers commissioned by the Association of American Colleges and Universities and conducted by Peter D. Hart Associates in November and December 2006. For a full report on the survey and its complete findings, see www.aacu.org/leap.

*Three starred items are shown in two learning outcome categories because they apply to both.
## Goals for All Students’ College Learning

Among all academic officers (with and without campus-wide goals), percent saying their institution has a learning goal or outcome addressing each area of knowledge/intellectual skills & ability

<table>
<thead>
<tr>
<th>Areas of Knowledge</th>
<th>Humanities</th>
<th>Science</th>
<th>Social sciences</th>
<th>Global/world cultures</th>
<th>Mathematics</th>
<th>Diversity in U.S.</th>
<th>Technology</th>
<th>U.S. history</th>
<th>Languages</th>
<th>Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72%</td>
<td>71%</td>
<td>70%</td>
<td>68%</td>
<td>68%</td>
<td>57%</td>
<td>48%</td>
<td>39%</td>
<td>33%</td>
<td>18%</td>
</tr>
</tbody>
</table>

### Intellectual Skills/Ability

- **Writing skills**: 77%
- **Critical thinking**: 74%
- **Quantitative reasoning**: 71%
- **Oral communication**: 69%
- **Intercultural skills**: 62%
- **Information literacy**: 59%
- **Ethical reasoning**: 59%
- **Civic engagement**: 53%
- **Application of learning**: 52%
- **Research skills**: 51%
- **Integration of learning**: 49%

## Goals for All Students’ College Learning

Among respondents from campuses WITH campus-wide goals, percent saying their institution’s common set of learning goals/outcomes addresses each area of knowledge/intellectual skills & ability

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<th>Technology</th>
<th>U.S. history</th>
<th>Languages</th>
<th>Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92%</td>
<td>91%</td>
<td>90%</td>
<td>87%</td>
<td>87%</td>
<td>73%</td>
<td>61%</td>
<td>49%</td>
<td>42%</td>
<td>24%</td>
</tr>
</tbody>
</table>

### Intellectual Skills/Ability

- **Writing skills**: 99%
- **Critical thinking**: 95%
- **Quantitative reasoning**: 91%
- **Oral communication**: 88%
- **Intercultural skills**: 79%
- **Information literacy**: 76%
- **Ethical reasoning**: 75%
- **Civic engagement**: 68%
- **Application of learning**: 66%
- **Research skills**: 65%
- **Integration of learning**: 63%
High Impact Practices

These widely tested teaching and learning innovations show substantial benefits, especially for college students from historically underserved backgrounds. But these practices remain optional rather than expected on most campuses.

First-Year Seminars and Experiences
Many schools now build first-year seminars or programs into the curriculum. These experiences regularly bring small groups of students together with faculty or staff. First-year experiences typically emphasize skills such as critical inquiry, frequent writing, information literacy, and collaborative learning that develop intellectual and practical competencies. First-year seminars can involve students with cutting-edge questions in scholarship and with the research of faculty members.

Common Intellectual Experiences
The older idea of a “core” curriculum has evolved into modern forms—a small set of required common courses, for example, or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community (see below). These programs often combine broad themes—technology and society, or global interdependence, for example—with an array of curricular and co-curricular options.

Learning Communities
Learning communities aim to encourage integration of learning across courses and to involve students with “big questions” that matter beyond the classroom. Students work closely with one another and with their professors in two or more linked courses. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some learning communities deliberately link “liberal arts” and “professional courses;” others feature service learning (see below).

Writing-Intensive Courses
These courses emphasize writing at all levels of instruction and across the curriculum, including final year projects. Students are encouraged to write for different audiences in different disciplines. The effectiveness of this repeated practice has led to parallel efforts in quantitative reasoning, oral communication, information literacy, and, on some campuses, ethical inquiry.

Collaborative Assignments and Projects
Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one’s own understanding by listening seriously to the insights of others, especially students with different backgrounds and life experiences. Approaches range from forming study groups within a course, to team-based assignments and writing, to cooperative projects and research.

“Science as Science Is Done”/Undergraduate Research
Scientists are reshaping their courses to connect key concepts and questions with early and active student involvement in systematic investigation and research. The goal, strongly supported by the National Science Foundation and the research community, is to involve students with contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from addressing important topics. These reforms are part of a broader movement to provide research experiences for students in all disciplines.

Diversity/Global Learning
Many colleges and universities emphasize courses and programs that help students explore cultures, life experiences, and worldviews different from their own. These studies—which may address U.S. diversity, world cultures, or both—often examine “difficult differences” such as racial, ethnic, and gender inequality, or continuing struggles around the globe for human rights, freedom, and power. Experiential learning in the community and/or study abroad frequently augment intercultural studies.

Service Learning, Community-Based Learning
These programs use field-based “experiential learning” with community partners as an instructional strategy, and often as a required part of the course. The goal: give students direct experience with issues they study in the formal curriculum and with efforts to analyze and solve problems in the community. The programs teach that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

Internships
Internships, another common form of experiential learning, provide students with direct workplace experience—usually related to their career interests—and with supervision and coaching from professionals in the field. Students complete a project or paper that is approved by a faculty member if the internship is taken for “course credit.”

Capstone Courses and Projects
These culminating experiences, sometimes called “senior capstones,” require students to create a project—a research paper, a performance, a portfolio of “best work,” or an artwork exhibit—that integrates and applies what they’ve learned. Capstones are offered in departmental programs and, increasingly, in general education as well.

FOSTERING ESSENTIAL LEARNING OUTCOMES –
ACROSS THE CURRICULUM AND CO-CURRICULUM

First Year Experience      Focused Studies      Advanced Integrative and Culminating
Major/Minor(s)             Work—in General and Major Studies

General Education

Effective Communication
Using Multiple Literacies
and Forms of Expression
e.g., writing, speaking;
multi-media;
technologies;
cross-cultural dialogue,
etc.

Analytic, Contextual
and Holistic Thinking
e.g. argument;
quantitative reasoning;
diverse viewpoints;
problem-solving;
research, etc.

Critical Reflection/
Informed Action as
Citizens
e.g., analyze social, civic and
equity issues;
one’s own role;
role of competing values;
cross-cultural and
historical perspectives,
etc.

Ethical Interactions in Local
and Global Communities
e.g., one’s own values and
bases for choice;
values questions in
chosen field;
group decision making;
role of civic values in
diverse democracy;

Integrative Learning
e.g., connections across
courses and disciplines;
connections between
liberal arts
and professional fields;
experiential and academic
learning;
advanced integrative
projects and culminating
work.
LEAP DESIGN PRINCIPLES FOR GENERAL EDUCATION AND INTEGRATIVE LIBERAL LEARNING

A) **Learning Outcomes:** Learning outcomes work to guide curriculum as well as pedagogical and assessment decisions. Students have multiple opportunities to explore both the “what” and the “why” of the program’s aims and intended outcomes.

B) **Sequential Progression from First to Final Undergraduate Years:** Sometimes referred to as “vertical design,” this design principle implements a first to final year structure—keyed to expected student capabilities rather than specified course content—with integrative and applied work at milestone and culminating points across the curriculum, and flexible points of entry for transfer students.

C) **Engaged Learning Practices:** Widely tested engaged learning practices that have proven benefits for college students are woven into the curriculum (examples include first year seminars/experiences, learning communities, writing intensive courses, collaborative projects and assignments, undergraduate research, internships, and capstone projects).

D) **Intellectual and Practical Skills in General Education and Majors:** Starting when students enter the program, the program builds clear links between skills (such as analytical reasoning, inquiry and research, quantitative and information literacy, problem-solving, community-based learning, integrative learning) developed in general education and those developed in majors.

E) **Civics, Diversity, & Global Emphases in General Education and Majors:** General education addresses these issues thematically and developmentally across the four years of college, with a strong focus on democracy and its contested applications; global interdependence and American pluralism; ethical issues and social responsibility; there are complementary emphases appropriate to the field within majors; and multiple opportunities for students to advance their learning and to engage diverse perspectives in field-based settings;

F) **Science as Science is Done:** Students experience science “in the making” through strong emphasis on scientific inquiry and analysis in general courses; they also have opportunities to tie their science studies to global challenges, ethical questions and public policy choices—with appropriate attention to diverse perspectives—both in general courses and in majors. Connections to real-world agencies, global research and data, etc underscore the emphasis on science as a continuing process of investigation, analysis and collaborative work.

G) **Advanced Cross-Disciplinary Inquiry:** This design principle focuses on “big questions” in the junior and senior year with students working across disciplines, with faculty, on problems that require multiple perspectives—disciplinary and societal—and investigation for their solution. Examples might include student working with faculty on “Mind, Brain and Behavior”; or “Environmental Sustainability”; or “Health and Human Rights: Comparative Policies and Models.”

H) **Integrative Capstones:** Capstones are designed to integrate general education requirements and learning in the major and to demonstrate that students can apply their learning to complex problems.
Each course is an “island of innovation”
Does it fit one category?

How does each course contribute to one or more of the shared LEAP learning outcomes?

In policy?
Yes
In practice?
No

Faculty Learning Community:
What do we want to know about how well students are achieving an outcome?

Students ask:
Have I completed my checklist of GE requirements?

Students ask:
How do I find GE courses to support the learning goals of my major?

General Education Assessment and the Learning Students Need LEAP Pre-conference Workshop
February 26, 2009
Lisa Maxfield maxfield@csulb.edu
For more information about GE at California State University, Long Beach visit http://www.csulb.edu/divisions/aa/ge/