

Liberal Studies and General Education in Undergraduate Curricula in the 21st Century: their Role, Development and the Challenges

J. Scott Lee

Executive Director

The Association for Core Texts and Courses

& ACTC's Liberal Arts Institute

at Saint Mary's College of California

The Future Undergraduate Curriculum's Role, Development and Challenges

Depend on:

Separation or Conjunction of General Education and
Liberal Studies

The Past and Present as found in the curriculum

Ancient and modern core texts in courses

Parts of this Presentation

- Description evolution of general education in U.S. in last 25 years
 - Increasing curricular complexity
 - Increasing faculty cooperation
- Prescriptive description of liberal arts education as part of general education
 - What a student /citizen needs
 - Liberal education models intellectual freedom

Trends in the Liberal Arts Core: A vision for the 21st Century

**A Research and Dissemination longitudinal
study of**

**the evolution of general, liberal education in
the U.S. between 1978 and 2004**

**the causes of change in general education in 81
institutions**

**Sponsored by the U.S. Department of
Education**

Usual Structure of General Education in 1978

“Distribution” or “Free elective” curricular system

3 primary divisions: Sciences, Social Sciences, Humanities

Better characterized as “Educational Shopping Mall” – complete with wings (divisions), aisles (departments) and wares (courses)

A focus on specializing

Question at the end of the 70's

- Could universities and colleges continue their strengths in specialization, but offer something more –
a liberal general education?

Three stages of evolution in curricular development toward general liberal education from 1978 to the 21st Century

- Increasing curricular complexity
- Increasing faculty cooperation
- Increasing attention to students

First stage: Departments start to build courses designed by faculty cooperating to build courses with a common syllabus... early 80's

For example, English/World Lit courses or Science for non-majors courses

Second Stage – mid 80's to early 90's

Cross-departmental Cooperation

For example, English, Foreign Language, Philosophy and History Departments cooperate to build Western Civilization courses all students must take

General Education Grows More Complex

- Old Distribution system structure:
 - Curriculum: student chooses courses out of three divisions
- New Category/subcategory system:
 - Curriculum: students are required to select or take courses out of many categories –
Lab science, Math, Foreign Language, Fine Arts, Composition, Western Civ or Interdisciplinary course

Average Percentage of Baccalaureate Credits Devoted to General Education Increased between 1978-2004

- Average Percentage 1978: 38.5
- Average Percentage 1998: 41.4
- Average Percentage 2002-2004, Phase II: 45.0

General Education Programs Became More Complex and Differentiated or Articulated

- Universities and Colleges crafted programs with more categories and subcategories – adding required types of courses
- Categories and subcategories increased by 41.6% in 20 years – indicating institutional differentiation in crafting unique general education programs

Third Stage Of Evolution: mid 90's into 21st Century

- Increased attention to students, 6 developments:
 - Further curricular invention and complexity
 - Diversifying modes of faculty cooperation
 - General Education comes to represent the whole institution and its traditions
 - Development of new areas of intellectual inquiry – especially in interdisciplinary areas
 - Development of goals and objectives for liberal general education
 - Intentional, comprehensive or “seamless” focus on students through general education

Course Level: Five modes of curricular coherence other than disciplinary study

- Focused cohort system: 1-4-4 system, Eckerd and Bard
- Learning Communities/Learning Teams: Ball State University
- Cluster system: James Madison University
- Supplemental instruction – both enrichment and enhancement: Loyola and Indiana Univ.
- Core Text Courses – ACTC's 120-200 institutions

A Comprehensive or “Seamless” General Education Experience

- Parts of the system:
 - Admission and orientation of students
 - Advising and housing for students
 - The Program of Study or Curriculum – for students
 - Co-curricular and Supplemental support for students
 - Faculty enculturation to general, liberal education
 - General Education review and assessment – including assessment of student learning
- All of these potentially function as a unit with respect to General--becoming Liberal--Education

8 Causes of Fundamental Change in General Education

1. Academic Leadership, from Faculty and Administration, either in a time of institutional crisis or institutional redefinition
2. Disciplinary (or Interdisciplinary) Differences in Concepts of Knowledge and aims of General Education
3. Departmental need for students
4. Rewards and Support for Faculty Participation in General Education
5. Generational change in faculty
6. Organizational structure of general education and general education review processes – including assessment
7. Institutional traditions of education and locale
8. Government /system regulations – including legislation and accreditation.

Are there ideas and texts found in more than one discipline that could or should be taught across a university as part of every student's education?

- A “ninth” cause of general education reform leading to liberal education:

Faculty care about this educational problem and cooperate in building courses to address it.

What is a “core text”?

- A “world classic” or a text of “major cultural significance
- A core text educates students everywhere to think and feel the depth of profound human concerns stretching across many disciplines, civilizations and eras – for the sake of the future

Can we build core text courses for the 21st Century?

- Both ACTC's *Trends* project and ACTC Annual Conferences indicate -- "Yes, we can."

Requirements in some subjects or kinds of courses were increasing,
 others decreasing: by increasing percentage of schools requiring
 subjects after 20 years

<u>1978:</u>	<u>1998:</u>	
• 30.2% require Lab	59.1% require Lab	+ 28.9 pts
• 30.2% require separate Math	59.1% require sep Math	+ 28.9 pts
• 04.8% require Diversity or other Culture Studies	33.3% require Diversity or other Culture Studies	+ 28.5 pts
• 22.2% require WC/GB/IH	50.0% require WC/GB/IH	+ 27.8 pts
• 28.6% require Fine Art	51.5% require Fine Art	+ 22.9 pts
• 54.0% require Natural Science	75.5% require Natural Science	+ 21.8 pts
• 03.2% require WAC/WI	24.2% require WAC/WI	+ 21.0 pts
• 34.9% require Foreign Lang	51.5% require Foreign Language	+ 16.1 pts
• 1986: 34.8% require Literature	25.7% require Literature	- 12.7 pts

Could Humanists Better Understand Science and
Could Scientists Understand the Value of the
Humanities

through Development of Interdisciplinary,
Humanities-and-science courses in General,
Liberal Education?

“Bridging the Gap Between the Sciences and Humanities”

- 2003-2005, ACTC national project
- \$ 244,000 Grant from U.S. National Endowment for the Humanities
 - 10 Participating Universities each send a team of one scientist, one humanist, one administrator
 - Two week summer seminar readings in core texts of humanities and sciences
 - Curriculum and faculty development at seminars and back on home campuses

Bridging the Gap Themes

- Year 1: Motion and Natural Law in a Political and Philosophical World
- Year 2: Life – Origins, Purposiveness, and Transformations
- Year 3: Technology, Art, Values, and the Problems of Technoscience

Year 2: Life - Origins, Purposiveness, and Transformations

– Day 1: Life and Origin:

- **Morning:** Readings: Plato, *Timaeus*, *Genesis* I, 1-11,
- **Afternoon: What is Life? Classical Reflections** Readings: Aristotle, *Parts of Animals* I; *On the Soul*, Book II; *On Respiration*; Galen, *On the Natural Faculties*, Selection;
- **Evening Lecture:** Peter Kalkavage on the *Timaeus*

– Day 2: Are Organisms by Design or Chance? The Ancient Debate

- **Morning: Reflections on Chance and Design** : Readings: Lucretius, *On the Nature of Things* Book I, Book V; Galen, *On the Usefulness of the Parts* Selection;
- **Afternoon: The Heart;** Readings: Galen, *On the Usefulness of the Parts* Book VI; Vesalius, Selection from *Epitome on Anatomy*;
Laboratory: Dissection of the Heart, Lung and Trachea according to Galen.

– Day 3: Life as a Mechanism

- **Morning: Harvey on the Circulation of the Blood;** Readings: Harvey, “On the Manner and Order of Acquiring Knowledge” (Reader); Harvey *On the Motion of the Heart and the Blood*. Film: *William Harvey and the Circulation of the Blood* (Wellcome Institute);
- **Afternoon:** Readings: Descartes, *Discourse on Method*, Part V; Selection from *Treatise on Man.*; Lavoisier “Experiments on Respiration (1777)” and “Memoir on Heat (1780);
- **Evening: Begin showing of film series *The Voyage of Charles Darwin* (7 parts) Parts 1-2**

– Day 4: Nature as a Work in Progress I: The Darwinian Revolution

- **Morning: “Form, Function and Transformism”** Readings: Selection from Aristotle, *Parts of Animals* I. chps i-iv; Lamarck, selection from the *Zoological Philosophy* Part I; Cuvier, Selection from “Lectures on Comparative Anatomy” (1800) and “Natural History of Fishes” (1828);
- **Afternoon: “Darwinian Transformism”;** Reading: Darwin, *On the Origin of Species* chps. 1-4.;
- **Evening: Darwin Film Series Parts 4-5-6**

– Day 5: “Darwinian Transformism”

- **Morning: Darwin’s *Origin* II;**Readings: Darwin, *Origin of Species*, chps. 9, 13, 14 ; Darwin, *Origin of Species* 6th ed. chp.4 ;
- **Afternoon:** Teams meet to discuss integration into courses of what they have read and discussed to this point.

Week Two

Day 6 : “Humanity in an Evolutionary Universe”

- **Morning:** Readings: Selections from Darwin, *Descent of Man*;
- **Afternoon: Evolution and Literature: Contrasting Views”** Readings: Tennyson, “In Memoriam.” (1858); Hardy, Poems “Hap” 1866, “Convergence on the Twain” and “In Tenebris” (Reader)

Day 7: The Question of Inheritance: Classical Mendelism

- **Morning:** Mendel, “Experiments on Plant Hybridization”;
- **Afternoon: Difficulties in Mendelism and the Theory of Chromosomes; Readings:** Morgan, T. H. “Sex-linked Inheritance in *Drosophila*” (1910); Sturtevant, “Linear Arrangement of Six Sex-Linked Factors in *Drosophila*” **Laboratory** on Fruitfly inheritance and Mendelian ratios.

Day 8: Mechanism, Reductionism and Purpose: The Contemporary Debate

- **Morning: Modern reductionism and the question of purpose: Readings:** Jacques Loeb, “The Mechanistic Conception of Life” (1912); Driesch, H. Selections from *The Science and Philosophy of the Organism*;
- **Afternoon: The Molecular Option: Readings:** Schrödinger, *What is Life?* (1945); Dorothy Wrinch, “On the Molecular Structure of the Chromosomes” (1936)
- **Evening:** Full Length BBC Film *Life Story* (on Watson-Crick Work)

Day 9: The Double Helix and Beyond

- **Morning:** Readings: Watson and Crick, the short 1953 papers; Marjorie Grene, “Biology and the Problem of Levels of Reality”
- **Afternoon:** Group Meetings and Assessment

Day 10: Presentations of Sample Curricula Developed from 2003 Workshop

Overall Results of Bridging the Gap Project

- 43 faculty development meetings – at least – in 10 institutions over three years
- 50 new courses, including pilot courses, 39 gen ed/core curriculum, 29 permanently adopted
- Structural reform in the curriculum in four institutions; “deep effects” on courses in general education in two other institutions
- Development of faculty leaders in general education at 9 out of 10 institutions

Curricular Challenge for the Future

- To have culturally literate, liberally educated citizens in order to have peace and freedom in the 20th Century
- For faculty: to educate is not simply to teach a specialty, but to be prepared to discuss broad, cross-disciplinary, cross-cultural questions of permanent human interest
- For students: to imagine and practice cross-cultural conversations among citizens of the 21st Century

Analects, I. i: “The Master Said:

“Having studied, to repeatedly apply what you have learned – is this not a source of pleasure?

To have friends come from distant quarters – is this not a source of enjoyment?”

ACTC Annual Conference, April 15-19, 2010, near
New York City

Contact, J. Scott Lee at jscottlee@prodigy.net or
www.coretexts.org