



The Role of Assessment in Furthering Student Engagement, Inclusion, and Achievement

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2009 GE and Assessment Conference
February 27, 2009 | Baltimore, Maryland

Assessment

- Develop learning outcomes
- Verify curriculum alignment
- Develop an assessment plan
- Collect assessment evidence
- Assess the evidence
- Close the loop

Let's focus on each step.

First, the learning outcomes.

AAC&U Suggestions: The Essential Learning Outcomes

- Knowledge of human cultures and the physical and natural world
- Critical and creative thinking
- Quantitative literacy
- Civic knowledge and engagement
- Ethical reasoning and action

Campus Examples

Knowledge of Human Cultures:

- Students can describe and analyze the capacity of race, ethnicity, class, gender, sexuality, disability, age, generation, and/or nationality to inspire, inform, and influence writers, artists and audiences (CSU Monterey Bay)

Quantitative Literacy

- Students can use tables, graphs, charts, and diagrams to explain concepts or ideas (Cabrillo CC)

Ethical Reasoning and Action

- Students can engage questions of ethics and recognize responsibilities to self, community, and society at large (U. of Delaware)

Alignment

Is your curriculum systematically designed to engage all students in achieving your learning outcomes?

A Cohesive Curriculum

- Coherence
- Ongoing Practice of Learned Skills
- Systematically Created Opportunities to Develop Increasing Sophistication and Apply What Is Learned
- Synthesizing Experiences to Integrate Learning

We want to develop deep and lasting learning—not shallow, short-term learning.

GE Curriculum Map

Requirement	Outcome 1	Outcome 2	Outcome 3
1	I		
2		I	
3	D		
4			
5	D		
6			
7	M		

The Assessment Plan:

Meaningful

Manageable

Sustainable

Some Characteristics of Quality Assessment

- Valid
- Reliable
- Actionable
- Efficient and cost-effective
- Engage students
- Interest us

Common Direct Assessment Strategies

- Published Tests
- Locally-Developed Tests
- Embedded Assignments and Course Activities: Signature Assignments
- Portfolios
- Capstone Projects

Common Indirect Assessment Strategies

- Surveys
- Interviews
- Focus Groups

Assessing the Evidence

- Direct assessment often involves the application of rubrics.
- Raters should be normed/calibrated to achieve reliable results.
- Indirect assessment requires taking an honest look at what people are telling us.

Closing the Loop

You can't fatten a pig
by weighing it.

A thermometer does
not cure a fever.

Closing the loop

- requires collegiality and flexibility
- usually requires focusing on our curriculum (vs. my course)
- may require the support and collaboration of faculty, staff, administrators, and faculty and staff development professionals

Some Friendly Suggestions

- Focus on what is important.
- Don't forget your adjunct faculty.
- Close the loop.
- Learn from your colleagues—both on-campus and external.

Without assistance, each of us will not only reinvent the wheel, we'll also reinvent the flat tire.





The Role of Assessment in Furthering Student Engagement, Inclusion, and Achievement

Patricia Iannuzzi

Student Learning

Faculty

teaching and
learning
Strategies

faculty
development

mentoring
modeling

and more...

Curriculum

academic
programs

general
education

first year
experience

capstone/
culminating
and more...

Co- Curriculum

leadership

living/learning
Communities

student support
advising

libraries
student clubs
athletics

Student Engagement



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

Intellectual And Practical Skills

Personal And Social Responsibility

Integrative Learning

through the application of knowledge, skills, and responsibilities to new settings and complex problems



Intellectual and Practical Skills

inquiry

creative thinking

oral communication

information literacy

critical thinking

written communication

quantitative literacy

analysis

problem solving

teamwork

Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance



For Example

- a. information literacy
- b. critical thinking
- c. communication

The student...

*assesses the quality and relevance of evidence,
including: spotting deception and holes in the
arguments of others*

From Collegiate Learning Assessment - Common
Scoring Rubric – Part 1 Critical thinking, analytic
reasoning and problem solving

- a. information literacy b. critical thinking c. communication

The student...

articulates and applies criteria for evaluating both the information and its sources, including: analyzes the structure and logic of supporting arguments or methods; recognizes prejudice, deception, or manipulation

From *Information Literacy Competency Standards for Higher Education*, Standard 3, performance indicator 2

- a. information literacy b. critical thinking c. communication

The student...

*draws valid conclusions based on the
information presented*

From ETS - Measure of Academic Proficiency and
Progress (MAPP) – Users Guide

- a. information literacy b. critical thinking c. communication

The student...

organizes the content in a manner that supports the purposes and format of the product

From *Information Literacy Competency Standards for Higher Education*, Standard 3, performance indicator 2

- a. information literacy b. critical thinking c. communication



The student...

presents evidence in an order that contributes to a persuasive and coherent argument

From Collegiate Learning Assessment - Common Scoring Rubric – Part 2 Written Communication

- a. information literacy b. critical thinking c. communication

- *develops a thesis statement and formulates questions...*
- *identifies the value and differences of potential resources...*
- *selects the most appropriate investigative methods...*
- *constructs and implements effectively designed search strategies...*
- *articulates and applies criteria for evaluating information and sources...*
- *summarizes main ideas, synthesizes to construct new concepts, compares new knowledge with prior...*
- *applies new and prior information to the planning and creation of a product*
- *follows laws, regulations, policies, etiquette... acknowledges sources when communicating product...*



Intellectual and Practical Skills

inquiry

creative thinking

oral communication

information literacy

written communication

critical thinking

quantitative literacy

analysis

problem solving

teamwork



Integrated Skills

inquiry

creative thinking

oral communication

information literacy

written communication

critical thinking

quantitative literacy

analysis

problem solving

teamwork



Academic Skills

inquiry

creative thinking

oral communication

information literacy

written communication

critical thinking

quantitative literacy

analysis

problem solving

teamwork



21st Century Literacies

inquiry

creative thinking

oral communication

information literacy

written communication

critical thinking

quantitative literacy

analysis

problem solving

teamwork



Common Elements

- require articulation of specific learning outcomes
- reflect higher order and lower order cognitive skills
- require application within and across disciplines
- developmental (sequenced over time)
- supported through curriculum content, instructional design, and co-curricular activities
- assessed by demonstration of what students can

DO

Articulating Assessable Learning Outcomes

Demonstrates effective written and oral communication (broad)

- Chooses a communication medium and format that best supports the purpose of the product and the intended audience

Applies critical thinking (broad)

- Compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, point of view, and bias
- Investigates differing viewpoints

Demonstrates academic honesty (broad)

- Selects an appropriate documentation style and uses it consistently to cite sources

The *Learning Outcomes* Approach

Learning outcomes are integrated:

- *knowledge*
- *abilities*
- *attitudes*

Needed to
function
successfully
in society

**What students should be able to do,
not what knowledge they possess**

Mark Battersby and the Learning Outcomes Network, Centre for Curriculum, Transfer, and Technology, Vancouver, BC

So, What's a Learning Outcome Anyway? 1999 ERIC Document 430-611

Learning Outcomes and Authentic Assessment

- Assessment is the means for learning-not just the method of evaluation
- Learning facilitated by doing, creating and using -- assignments are the key to learning
- Situations are simulated in which students integrate and apply knowledge, abilities and values
- Develop “useable knowledge” not “testable knowledge”

Mark Battersby and the Learning Outcomes Network, Centre for Curriculum, Transfer, and Technology, Vancouver, BC
So, What's a Learning Outcome Anyway? ERIC Document 430-611

Assessment
Techniques



Performance-based --
linked to student's
performance



Authentic Assessment



Portfolios



Journals



Categorizing
Grid



Checklists



Rubrics



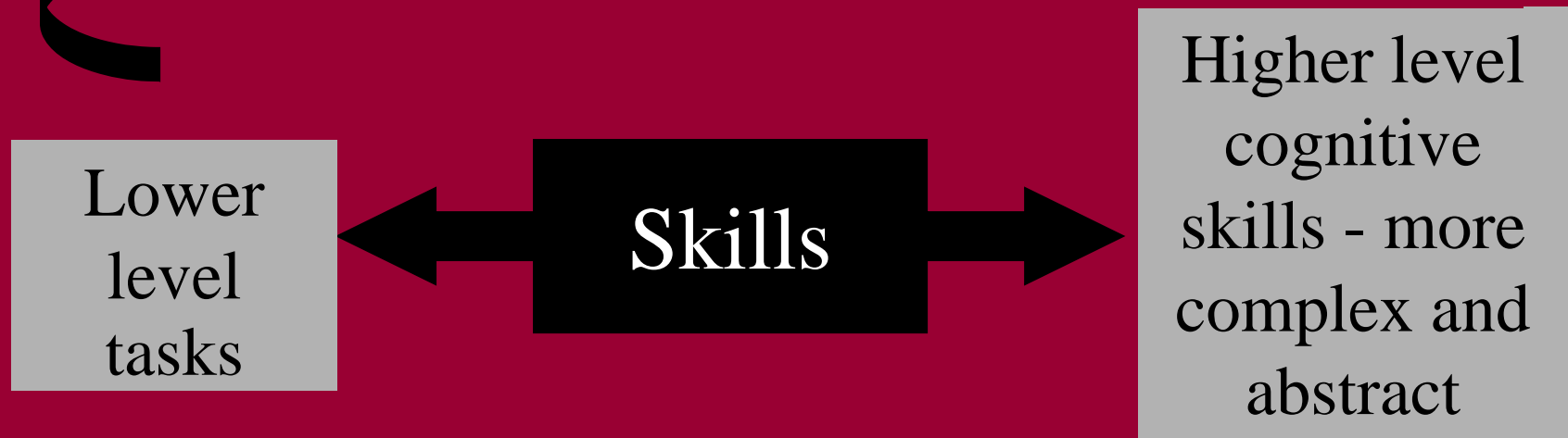
1 Minute Paper



Conferences

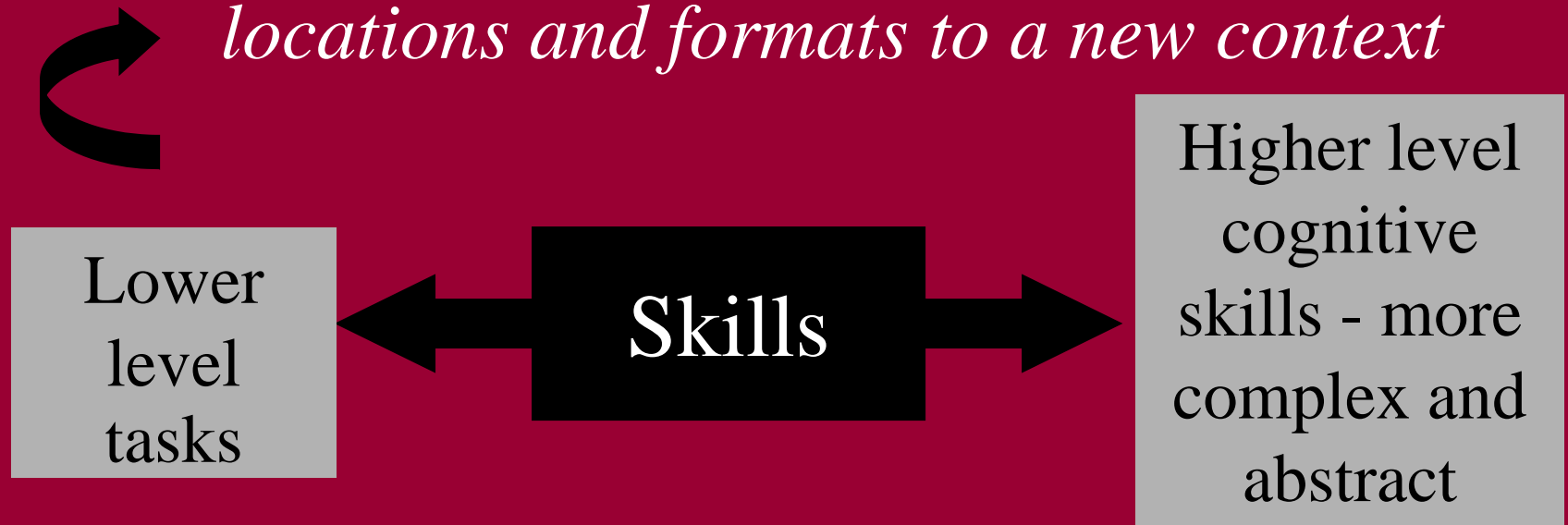


Examines and compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias



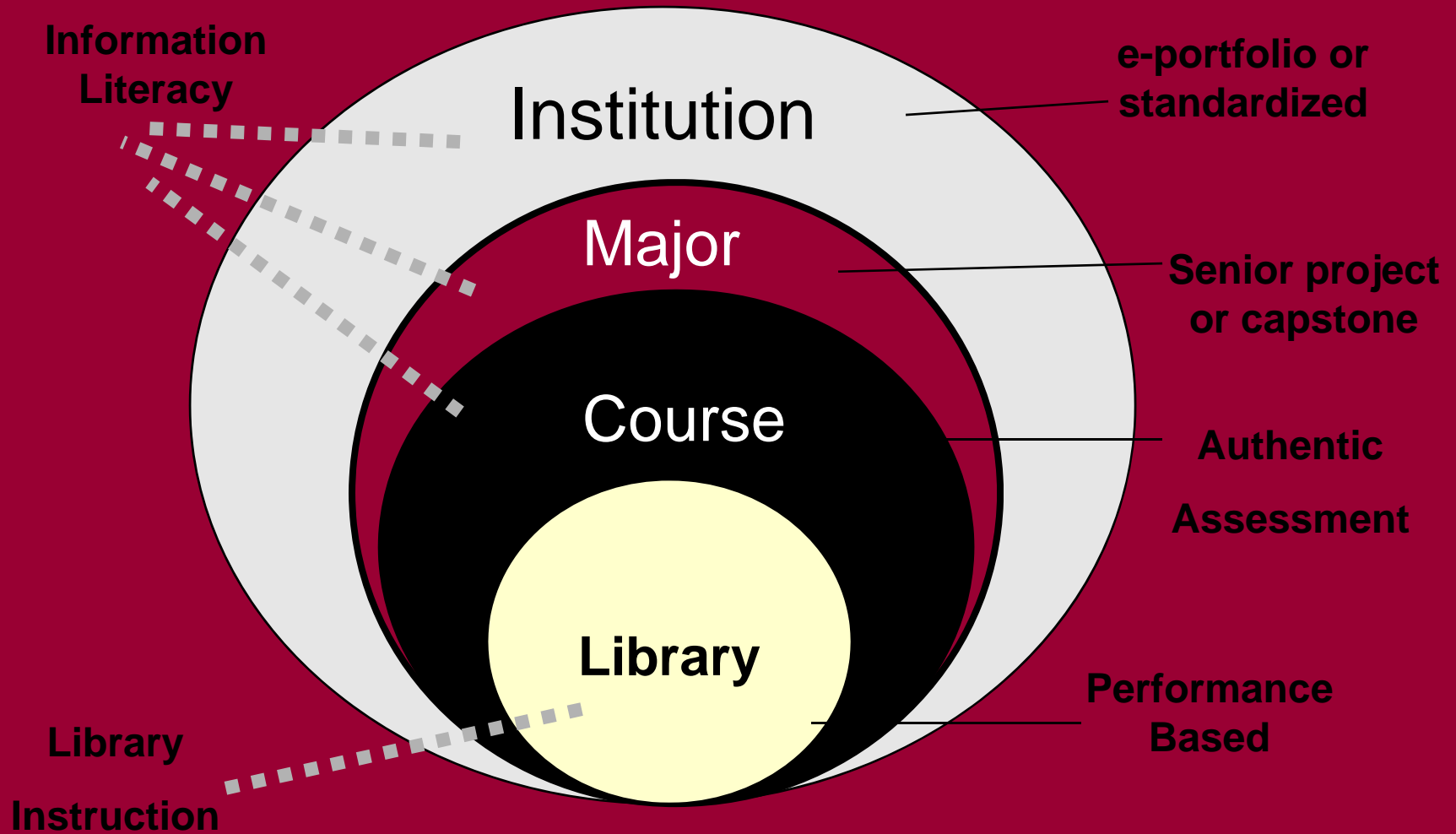
analyzes the structure and logic of supporting arguments or methods

Manipulates digital text, images, and data, as needed, transferring them from their original locations and formats to a new context



organizes the content in a manner that supports the purposes and format of the product

Responsibility for Assessment



Outcomes Assessed by iSkills

1. Define

Determine the information need

Determine where the information can be found

2. Access

Search and access the information from databases, internet, or other

Refine search if needed

3. Evaluate

Assess relevancy of information

Critically evaluate if the information retrieved fulfills the need

4. Manage

Organize information [sort emails in folders, org chart, etc.]

Document relationships using charts

5. Integrate

Synthesize, summarize, compare, and draw conclusions from multiple sources

Compare and contrast information from multiple sources

6. Create

Generate information by analyzing data

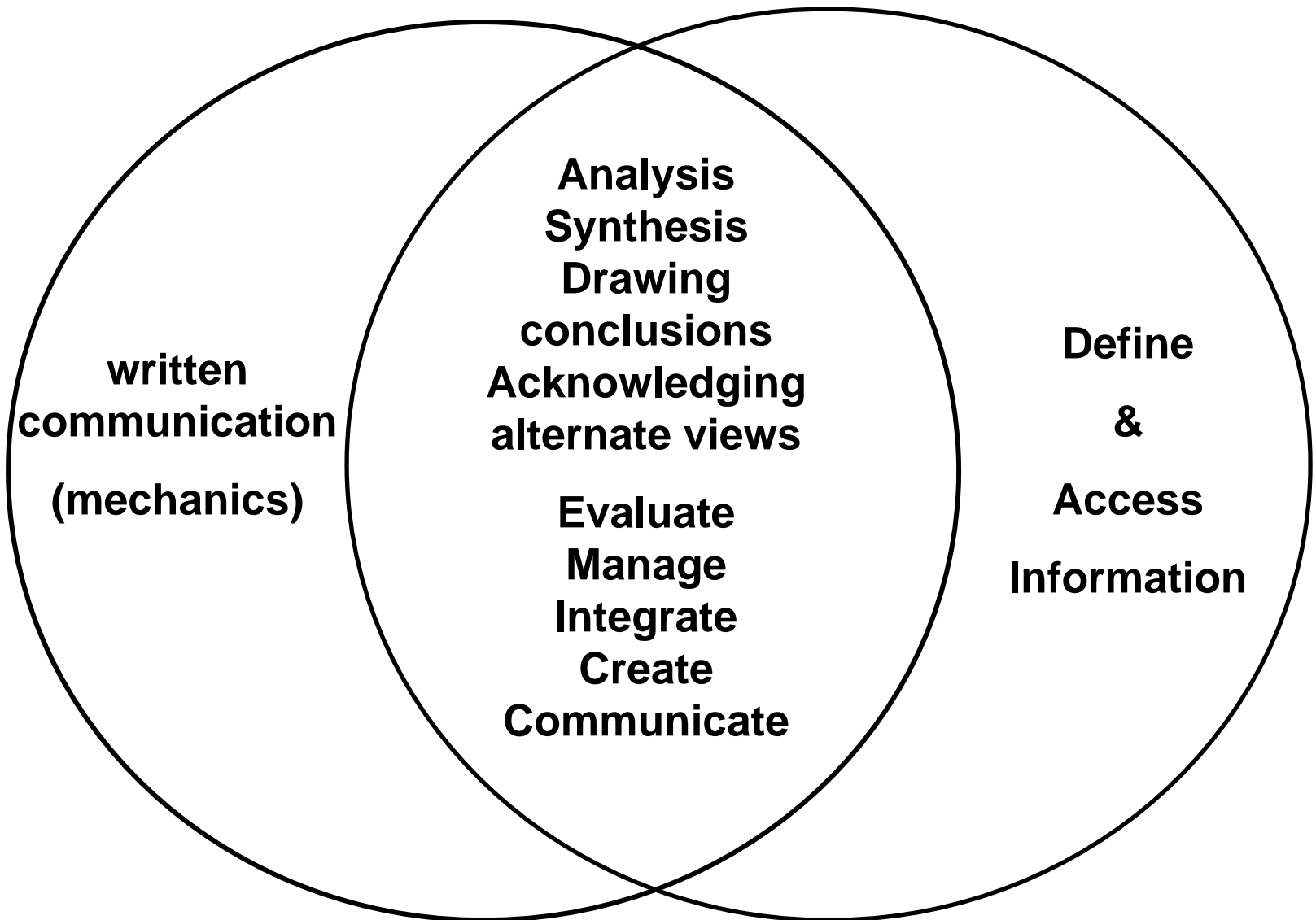
Create graph, select text or graphics to communicate information

7. Communicate

Convey information to various audiences using the appropriate medium

Adapt presentation slides and revise emails

Comparing CLA and ISkills



In Sum

- **Identify campus contributors to student learning**
- **Articulate outcomes - general and in disciplines**
- **Identify options for integration within and external to curriculum**
- **Intensify faculty development**
- **Ensure solid infrastructure of leadership and support for teaching and learning**
- **Create diagnostic, interim, and capstone assessments to give individual student feedback**
- **Guide students in plans of study connecting desired outcomes with curricular and co-curricular choices**
- **Involve all stakeholders in assessment planning**



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Sylvia Hurtado

Goals: Personal and Social Responsibility, Intercultural competence

- Inventory
 - Existing programs that inform these goals
 - Existing data which give insight into these outcomes
- Decide what new information you need
 - Multiple Outcomes=Multiple Measures
- Value-added (longitudinal)
- Milestones (periodic assessment)

**Pluralistic Orientation: End of First Year
(N= 29,796 students; Alpha reliability =.85)**

Tolerance of others with different beliefs	.82
Ability to work cooperatively with diverse people	.81
Openness to having my own views challenged	.80
Ability to discuss/negotiate controversial issues	.77
Ability to see world from someone else's perspective	.76

Now on entering student surveys, end of first year,
college senior surveys, ten year followup (CIRP)

College Experience Effects on Pluralistic Orientation: End of First Year, CIRP

Informal

- Positive interactions with diverse peers
- Taking action on racial issues
- Hrs/week working for pay
- Hrs/week studying
- Hrs/week socializing

Campus facilitated

- Leadership training
- Diversity co-curricular activities
- Diversity courses
- Service learning & community service
- Course opportunities for intensive dialogue

Social Agency Values

(N= 27,288 students; Alpha reliability .76)

Influencing social values	.84
Helping to promote racial understanding	.76
Influencing the political structure	.75
Helping others who are in difficulty	.68

College Experiences Predicting Social Agency Among College Seniors

Informal

- Positive interactions with diverse peers
- Negative interactions with diverse peers
- Voted in a student election

Also related to high ratings on:

Academic ability

Understanding of others

Self-understanding

Campus

- programs/opportunities
- Performed community service as part of a class
- Attended a racial/cultural awareness workshop
- Took an ethnic studies course
- Took a women's studies course

Using Survey Data and Standardized Tests

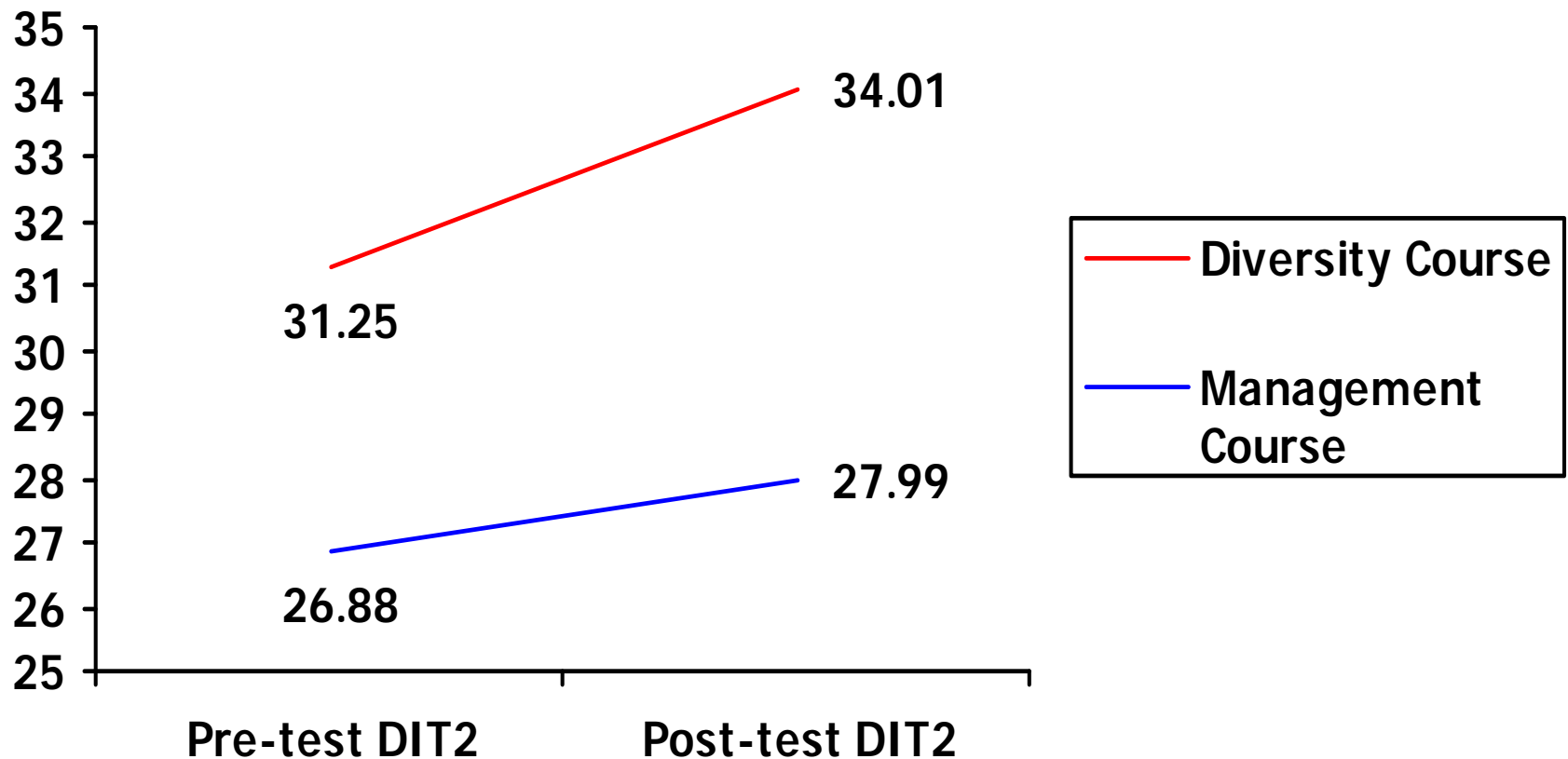
- How are some survey measures related to cognitive outcomes or moral reasoning?
- Which do we use?
- Study in classrooms: Introductory Courses or Psychology Pool
 - Administer standard tests to random sample, split samples, use sophisticated software to analyze
 - Study in Intro to Psychology, random assignment of 289 students to test relationship between cognitive tests and outcomes on our survey
 - Moral reasoning was administered in three classrooms to compare introductory classes that had similar goals but were different in content. URM composition was 15%.

CIRP Items and Cognitive Measures

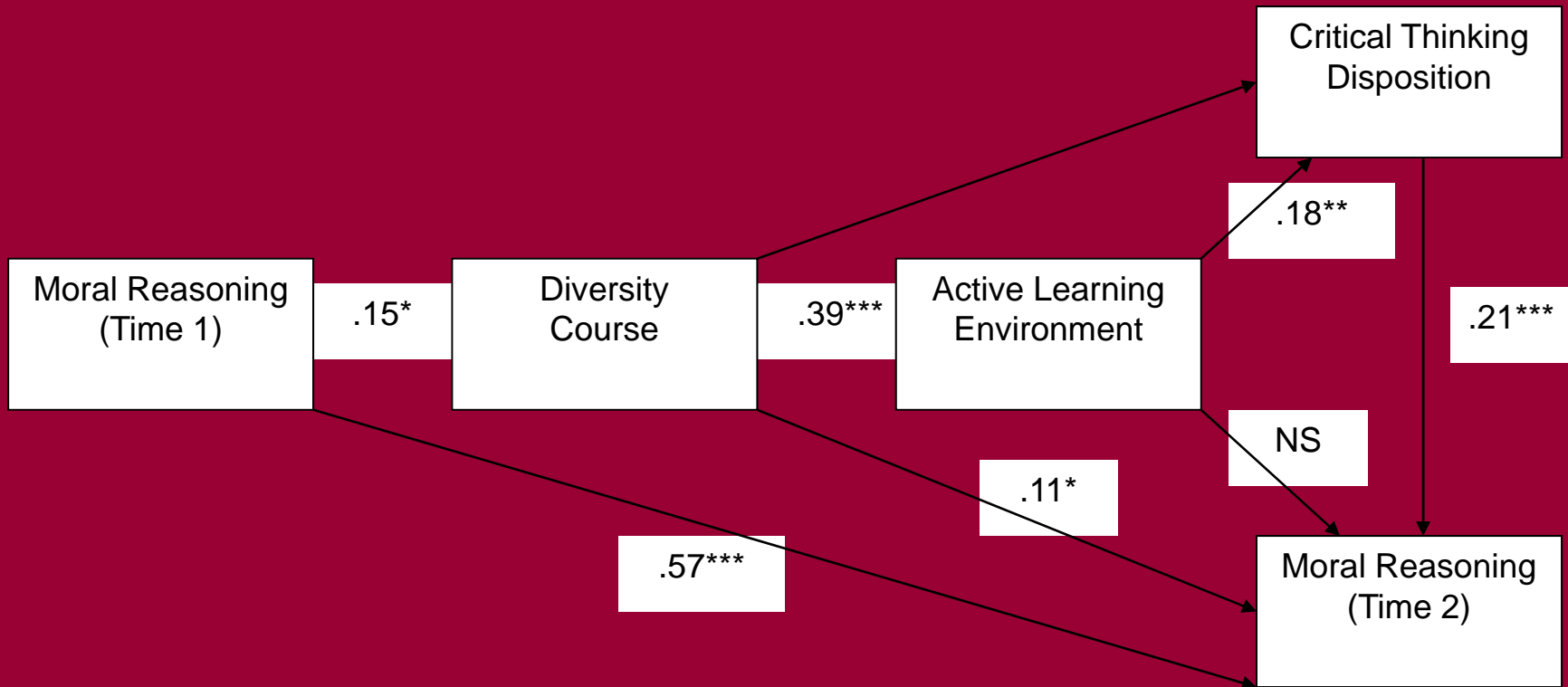
Cognitive Measure	SAT V	SAT M	Academic Self-concept	Social Agency
Critical Thinking Skills Test	.25**	ns	.25*	ns
Critical Thinking Dispositions	.14*	ns	.42**	.36**
Open-mindedness	.22**	ns	ns	.39**
Inquisitiveness	ns	.11**	.28**	.36***
Reflective Judgment	.24**	ns	ns	ns
Need for Cognition	.17**	-.16*	.55**	.27**

University Classroom Study

Moral Development



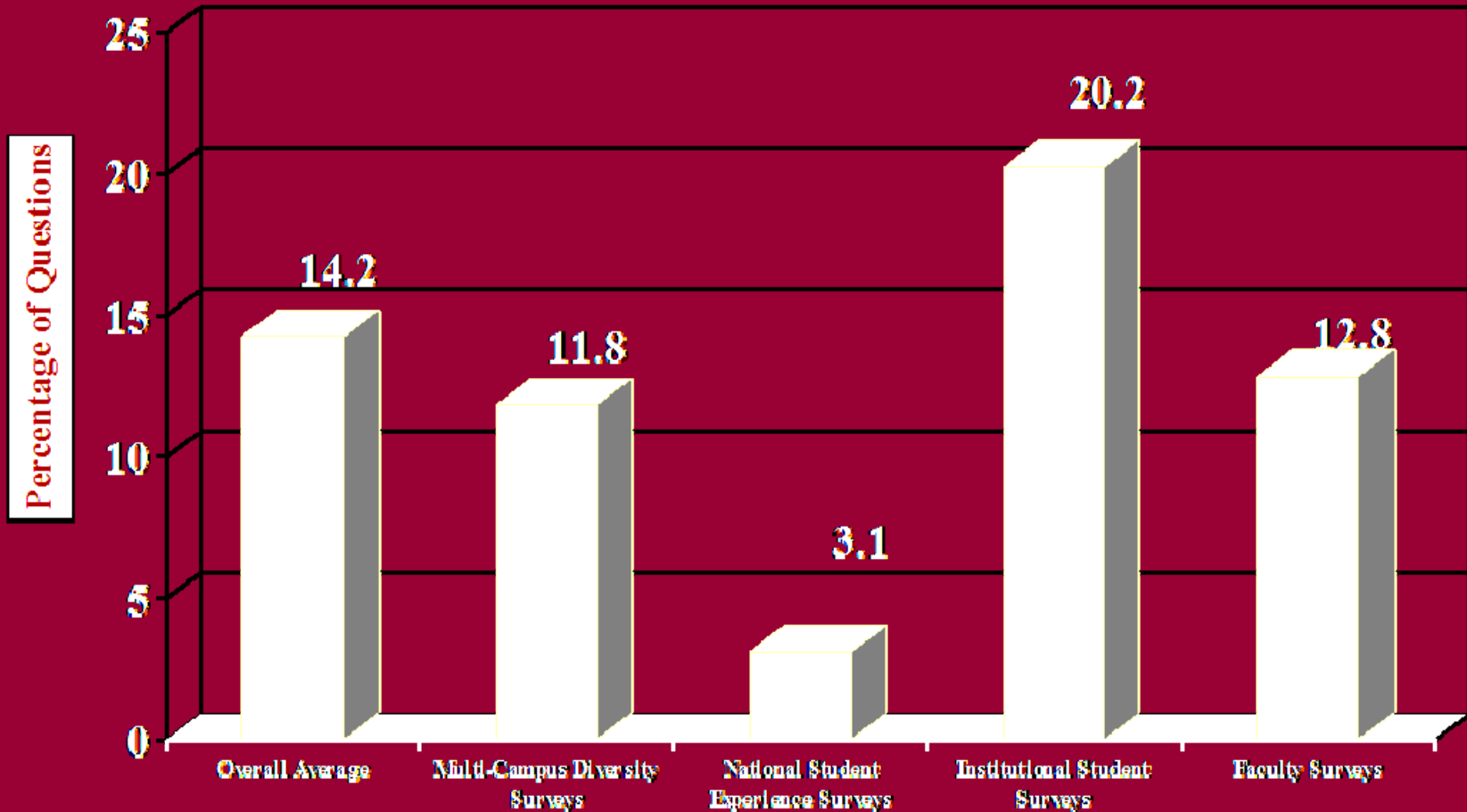
Predisposition, Diversity Content, and Pedagogy Effects On Moral Reasoning



What We Learned

- There are multiple ways to measure the common goal of preparing college students to participate in a diverse democracy including:
 - Multiple measures of cognitive outcomes
 - Changes in interests in social issues (e.g. causes of poverty)
 - Moral reasoning tests
 - Leadership behaviors (in college and post college)
 - Cultural awareness
- Colleges can learn more by linking local data with these common measures

Multi-Campus Surveys: Assessing Campus Climate for Diversity



Resources

Higher Education Research Institute, UCLA

www.gseis.ucla.edu/heri

News

New national research

Registration for survey instruments

Publications, research reports

Tool kits for assessment

Interactive forum online: Ask questions and get advice from others using data on college students