

Liberal Education and America's Promise: Why Focus on Signature Assignments Now

Indiana Signature Assignments Workshop
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Debra Humphreys
Association of American Colleges & Universities
humphreys@aacu.org
www.aacu.org



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The Big Picture

“The world in which today’s students will make choices and compose lives is one of disruption rather than certainty, and of interdependence rather than insularity.”

College Learning for the New Global Century
(AAC&U 2007)



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Liberal Education & America's Promise



EXCELLENCE FOR EVERYONE AS A NATION GOES TO COLLEGE

**“A COLLABORATION BETWEEN EDUCATORS, STUDENTS,
POLICYMAKERS, AND BUSINESS AND COMMUNITY LEADERS”**



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LEAP in 2014

*Bringing Democracy and
Economic Opportunity Together –
Through the Power and Value of
A Horizon-Expanding, Innovative,
and Transformative Liberal
Education*



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To Ensure Our Democratic and Economic Future, Students Need

- The Capacity to Envision
- Analytical Skills to Test Alternatives
- The Desire and Ability to Solve Problems Across Difference
- Wisdom to Consider Larger Contexts and Consequences
- Commitment to Devote Time and Talent to the Making of a Better World



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Narrow Learning is Not Enough

The LEAP Essential Learning Outcomes

- *Knowledge of Human Cultures and the Physical and Natural World*
Focused on engagement with big questions, enduring and contemporary
- *Intellectual and Practical Skills*
Practiced extensively across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance
- *Personal and Social Responsibility*
Anchored through active involvement with diverse communities and real-world challenges
- *Integrative and Applied Learning*
Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems



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Reason #1

Our curricula—including the work we assign students to do across the curricula—must build their capacity to succeed and flourish in a world of complexity, change, and interdependence. We need to work together on new designs for assignments that accomplish this goal.



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How Are Workplace Demands Changing?

“Human work will increasingly shift toward two kinds of tasks: solving problems for which standard operating procedures do not currently exist, and working with new information—acquiring it, making sense of it, communicating it to others....today, work that consists of following clearly specified directions is increasingly being carried out by computers and workers in lower-wage countries. The remaining jobs that pay enough to support families require a **deeper level of knowledge and the skills to apply it.**”

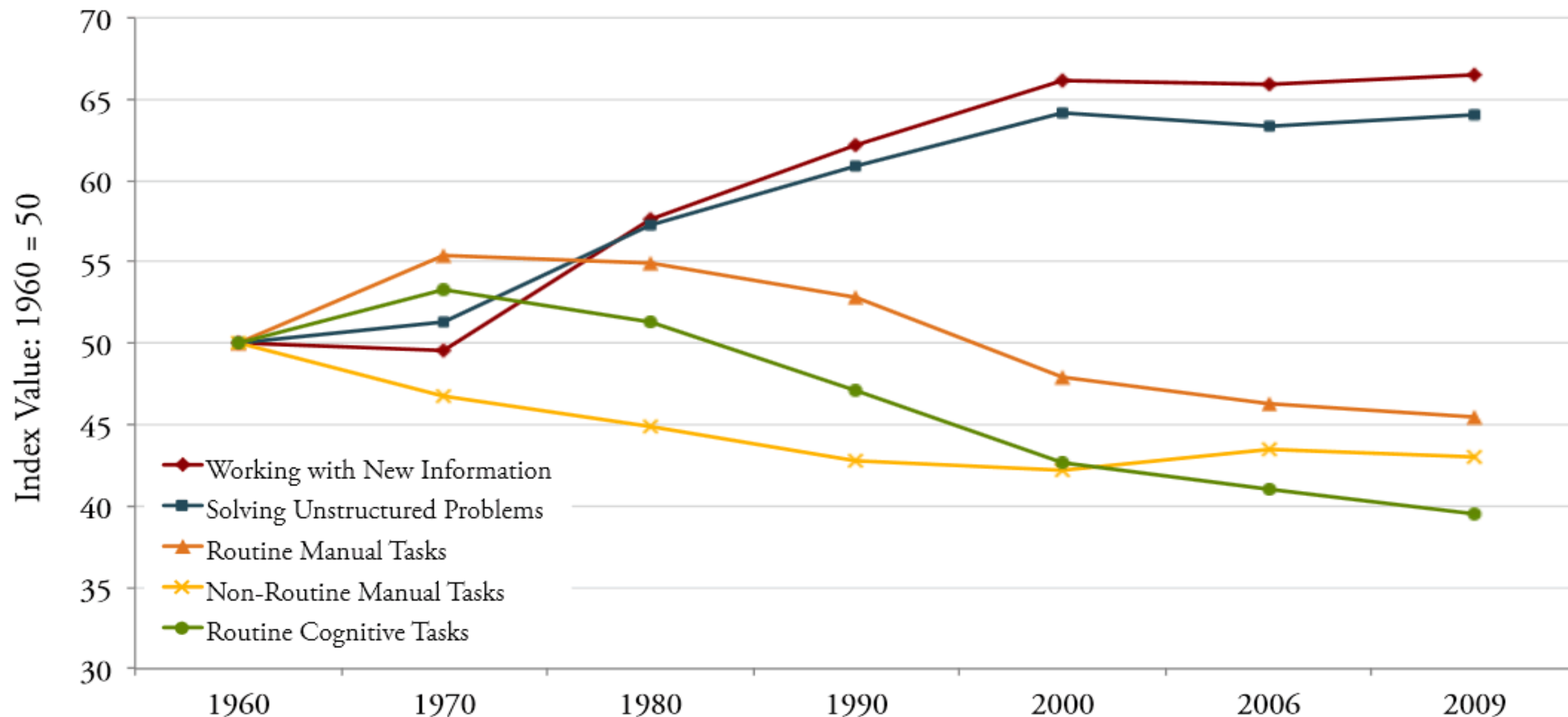
“Frank Levy and Richard Murnane, *“Dancing with Robots”*
(2013)



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The Changing Workplace

Figure 3: Index of Changing Work Tasks in the U.S. Economy 1960-2009



Source: *Dancing with Robots: Human Skills for Computerized Work*, by Frank Levy and Richard J. Murnane. Third Way, 2013.

Employers Focus on Capacity for Learning/Problem-Solving

“The premium on lifelong learning just keeps going up...the world is changing even faster. Learning how to love learning is becoming more important – and the importance of static knowledge is going down....Students have to have knowledge and know how to use it—know AND do. All learning should revolve around projects.”

*David Rattray, Senior Director, Education & Workforce Development,
LA Chamber of Commerce*



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National Surveys of Employers on College Learning and Graduates' Work Readiness

AAC&U commissioned Hart Research Associates (in 2006, 2007, 2009, and 2013) to interview employers (C-level suite executives and, in 2009 additional human resource professionals) whose companies report that hiring relatively large numbers of college graduates

How Should Colleges Prepare Students to Succeed in Today's Global Economy?
(AAC&U, 2007)

How Should Colleges Assess and Improve Student Learning? Employers' Views on the Accountability Challenge (AAC&U, 2008)

Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn (AAC&U, 2010)

It Takes More Than a Major: Employer Priorities for College Learning and Student Success (AAC&U, 2013)

See: www.aacu.org/leap/public_opinion_research



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It Takes More Than A Major:

Employer Priorities for College Learning and Student Success

Key findings from survey among 318 employers

Conducted January 9 – 13, 2013

for



Association of American Colleges and Universities

Employers Prioritize Innovation and Transferable Skills

■ Strongly agree with this statement about employees/future hires ■ Somewhat agree

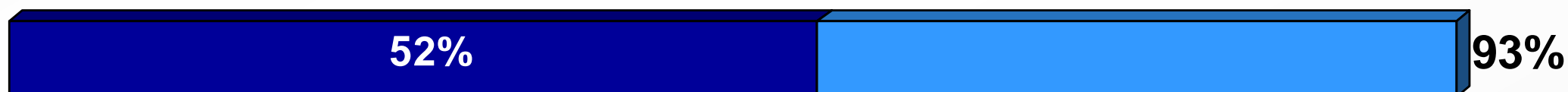
Our company puts a priority on hiring people with the intellectual and inter-personal skills that will help them contribute to innovation in the workplace



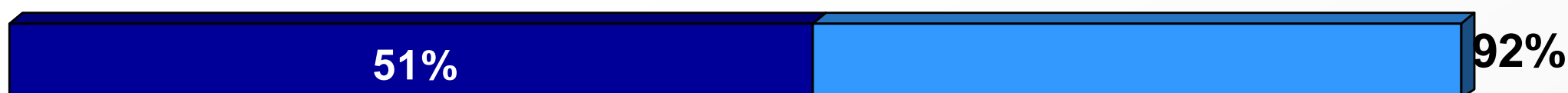
Candidates' demonstrated capacity to think critically, communicate clearly, & solve complex problems is more important than their undergraduate major



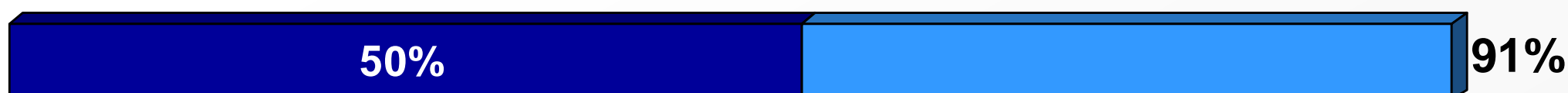
Our company is asking employees to take on more responsibilities and to use a broader set of skills than in the past



Innovation is essential to our company/organization's continued success



The challenges employees face within our company are more complex today than they were in the past



Employers value cross-cutting skills and support liberal arts, diversity, and civic learning

■ Very important that our employees have this quality/skill ■ Fairly important

Ethical judgment and integrity



Comfortable working with colleagues, customers, and/or clients from diverse cultural backgrounds



Demonstrated capacity for professional development and continued new learning



Interest in giving back to the communities in which our company is located or those that it serves



Knowledge of global cultures, histories, values, religions, and social systems



Key Capabilities Open the Door for Career Success and Earnings

“Irrespective of college major or institutional selectivity, what matters to career success is students’ development of a **broad set of cross-cutting capacities...**”

*Anthony Carnevale, Georgetown University
Center on Education and the Workforce*



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Reason #2

To ensure that we are setting up students for long-term professional success, all students need direct experience—across the curriculum—probing and tackling unscripted problems. If they are invested in the problems, they are more likely to develop the problem-solving capacities they need.



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Employers endorse research, applied learning, and project-based curricula

Percentage of Employers Who Say Practice Will Help Students A Lot or A Fair Amount to Succeed in the Workplace

Research and Evidence-Based Analysis

83%

Expecting students to develop the skills to research questions in their field and develop evidence-based analyses

Senior Projects

79%

Students complete significant project before graduation, demonstrating knowledge in major & analytical, problem-solving, communication skills

Internships and Community-Based Work

78%

Students complete internship or community-based field project to connect classroom learning with real-world experiences

Collaborative Research

74%

Expecting students to develop the skills to conduct research collaboratively with their peers



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It Takes More Than a Major and More Than a Random Collection of Courses

“Beware. Your degree is not a proxy for your ability to do any job. The world only cares about — and pays off on — what you can do with what you know (and it doesn’t care how you learned it). And in an age when innovation is increasingly a group endeavor, it also cares about a lot of soft skills — leadership, humility, collaboration, adaptability and loving to learn and re-learn. This will be true no matter where you go to work.”

*Lazslo Bock, senior VP of people operations,
Google (quoted in NY Times 2/23, 2004)*



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How Do We Get There? And How Will We Know If We've Succeeded?

- **Re-map the curriculum—more intentional designs; more cross-disciplinary work**
- **Connect general education requirements/skill-building with upper-division project-based curricula in majors**
- **Require every student to do problem-based work and evidence-based research**
- **Embed real-world application at multiple levels**



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Implications for Disciplines, Assignments, and Assessments,

- **Entire educational experience—through scaffolded curricula, assignments, and assessments—should build capacity to grapple with big questions and unscripted problems**
- **Disciplinary inquiry still foundational, but students need to connect disciplines to other perspectives and understand limitations of disciplines**
- **Students' portfolios can organize their own documentation and development of key capacities**



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How Might This Work in the Real World?

- **Kentucky Quality Collaboratives Project (connected to new General Education outcomes-based transfer policy)**
- **Gen Ed Transfer organized around broad SLOs**
- **Professional Learning Communities**
- **Eg. Math, Developmental Math, and Statistics faculty worked together across system to design and scaffold assignments—and coordinate assessments**



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KY Example: Quantitative Reasoning

- 1. Interpret information in mathematical or statistical forms. (LEAP B)***
- 2. Illustrate and communicate mathematical and/or statistical information symbolically, visually, and/or numerically. (LEAP A, B and C)***
- 3. Determine when computations are needed and to execute the appropriate computations. (LEAP B)***
- 4. Apply an appropriate model to the problem to be solved (LEAP A, C and D)***
- 5. Make inferences, evaluate assumptions, and assess limitations in estimation modeling and/or statistical analysis. (LEAP B, C and D)***

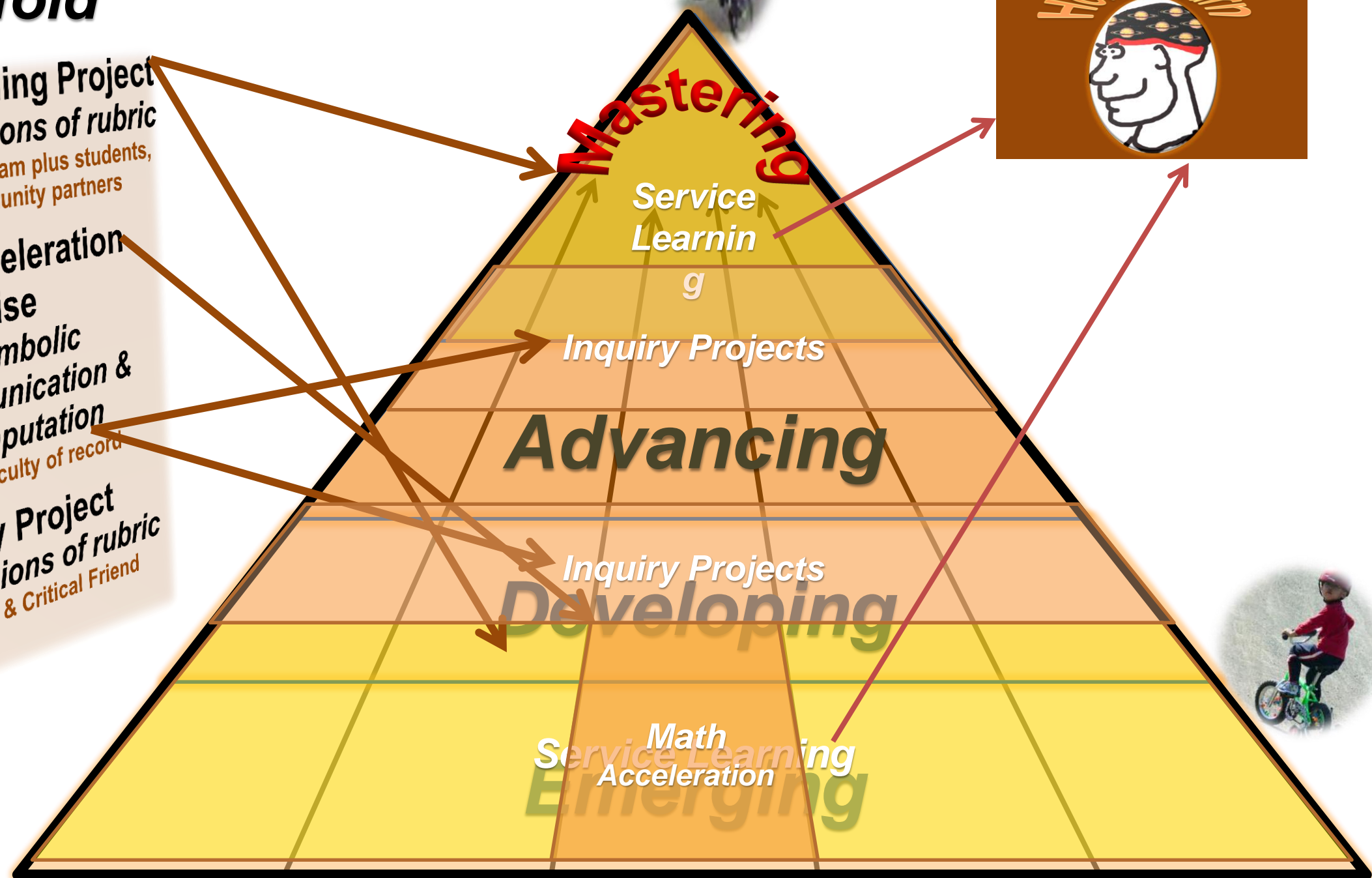
**QR courses should meet all five SLOs.*



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Assignment Scaffold

- **Service Learning Project**
 - ✓ All dimensions of rubric
 - Faculty team plus students, community partners
- **Math Acceleration Exercise**
 - ✓ Symbolic communication & computation
 - Faculty of record
- **Inquiry Project**
 - ✓ All dimensions of rubric
 - Faculty & Critical Friend



Quantitative Value Rubric

Kentucky Essential Learning Outcomes or DQP

Interpretation	Representation & Communication	Calculation	Application/Analysis	Assumptions
Interpret mathematical and/or statistical information.	Illustrate and communicate math/stat information symbolically, visually, and/or orally.	Determine and execute necessary computations.	Apply appropriate models to solve problems.	Make inferences, evaluate assumptions, & assess limitations in modeling and/or statistical analysis.

Reason #3

- **Declining public confidence in the quality/value of college degrees**
- **Policymakers respond with increased demands for accountability—need assessment results that are easily communicated but also calibrated to these 21st-century learning outcomes**
- **Why we must coordinate signature assignments; scaffold them; and use them for common assessment purposes**



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Signature Assignments—Scaffolded Across the Curriculum Can Help Students Understand the True Power of Education

“In a world of relentless change, all students need the kind of education that leads them to ask not just ‘how do we get this done?’ but also ‘what is most worth doing?’”

College Learning for the New Global Century, 2007



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