(RhythmTempo) 3.00

0.52

(Dynamics) 2.84

0.52   0.63

(ToneQuality) 3.02   (MusicalityInterpretation) 2.88

0.50

0.52   0.57   0.55

(Intonation)   (Technique)

0.51

ABOVE: MAPPED CORRELATES OF 85 ASU MUSIC STUDENTS' RUBRIC RATINGS BY 15 JURORS

Assessment Update 2012 Student Learning Outcomes

Arkansas State University Jonesboro

Self-report of student learning: Does thinking make it so?

The 2011 release of Arum's and Roksa's *Academically Adrift* (University of Chicago Press) fueled public demand for evidence of meaningful learning by college students attending public and private universities. Data cited by Arum and Roksa prompted members of professional societies in higher education to analyze their own data and compare findings. The American Association of Colleges and Universities (AAC&U) reviewed data from the Educational Testing Service (ETS) and ACT's Collegiate Assessment of Academic Proficiency (CAAP); they concluded that 75% of college freshmen and 60% of college seniors are not proficient in math, critical thinking, reading, or writing. Surveys of students'

perceptions of competence on these outcomes (NSSE, CIRP, Wabash), however, indicate that the vast majority of students believe their college experience has contributed quite a bit or very much to their increase in intellectual and applied skills. Are students academically adrift, or can factors such as low-stakes assessment and limited generalizability of standardized test findings account for the discrepancy? Regardless of a department's preference for standardized tests, locally developed assignments graded by rubrics, or e-portfolios, the charge of assessment at ASU is to demonstrate the worth of higher education to our stakeholders.
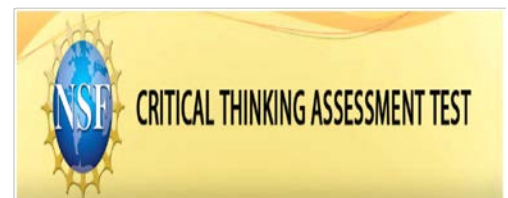
Finley, A. (2012) *Making Progress? What we know about the achievement of liberal education outcomes*. AAC&U.

General Education

The 2012-2013 General Education Committee will be reviewing Composition I, Composition II, and Oral Communications to assess student competencies related to the learning outcome of *Communicating Effectively.* The successful student will:

◆ ***produce writing that demonstrates proficiency in standard edited American English to make reasoned, well-organized arguments that are accurately documented***

◆ ***construct and deliver a well-organized, logical, and informative presentation.***

In response to ETS proficiency profile scores reported by seniors in 2010, the Office of the Provost approved the following recommendations by the 2011-2012 General Education Committee:

*The <u>hiring of a Writing and Composition Director</u> . Dr. Marcus Tribbett is spearheading improvements to ASU's composition courses, training tutors at the writing center, evaluating "Grammarly," our current e-rater available for faculty and student use, and he is working on 2013-2014 plans to provide each college with a graduate scholar who will assist faculty teaching writing intensive courses across the curriculum.

*<u>Transcript Trajectory Studies</u> that analyze a student's path to graduation according to the number of required reading and writing intensive courses
*Inclusion of <u>course rigor on faculty evaluations </u>such that faculty receive high marks for teaching reading and writing intensive courses
*Adopting the view that while the General Education curriculum is the foundation for critical thinking and writing skills and that General Education courses will be held to account for providing that foundation, <u>the development of students in the areas of critical thinking and proficient writing ought to be an integral element in each degree program</u> and, as such, each degree program is responsible for incorporating critical thinking and writing in its curriculum and assessing its students in these areas

*<u>Providing faculty development</u> opportunities related to evidence-based practices in teaching critical thinking and writing such as prompt feedback, high expectations, use of technology, and opportunities for faculty and student discussion

University College responded to this report by implementing "just in time" review of writing essentials and developing and implementing a common grading rubric for all reading and writing assignments across sections of a course.

Skill Dimension	Proficiency Classification		
Seniors (N = 304) Fall 2010	Proficient	Marginal	Not Proficient
Writing, Level 1	64%	26%	11%
Writing, Level 2	21%	36%	43%
Writing, Level 3	7%	28%	66%

GENERAL EDUCATION SLOS

*Communicating Effectively

*Using Mathematics

*Developing a life-long appreciation of the Arts and Humanities

*Using Science to accomplish common goals

*Developing a strong foundation in the Social Sciences

ETS Proficiency Profile Exam
A detailed report of these findings is available on the Assessment website.

Senior Exit Survey
"How well equipped do you believe you are to construct and deliver a well-organized, logical, and informative presentation?
N = 612
Mean = 5.83
SD = 1.07 (1 = not at all equipped; 7 = extremely well equipped)

UNIVERSITY SLOS

History – Act 747

As departments scrambled to comply with state requirements that limit degree programs to 120 credit hours of coursework, the General Education committee and Faculty Senate voted to transfer assessment of four orphan general education student learning outcomes to appropriate ASU councils.

The following General Education Student Learning Outcome (2010) – Health and Wellness - became a co-curricular emphasis of student affairs:
Students will
*Describe the impact of diet, physical activity, and lifestyle choices on healthy living
*Analyze contemporary health and wellness topics

UNIVERSITY-LEVEL Student Learning Outcomes

Responsibility for three additional student learning outcomes was transferred to the advisory council of the Office of Assessment – Student Learning Outcomes. The Learning Outcomes Advisory Council (LOAC) is comprised of a representative from each college.

critical thinking
global issues
using technology

CRITICAL THINKING ASSESSMENT TEST (CAT)

Dr. Anne Grippo,
Dr. Farhad Moeeni,
Dr. William McLean,
Dr. John Seydel

Contact any of these faculty members, all of whom are trained to score this ESSAY-style, 45-minute, reliable and valid exam.

GLOBAL PERSPECTIVES INVENTORY (GPI)

Dr. Greg Meeks
Dr. MaryJane Bradley
Dr. Lina Owens

COE administers the GPI as a measure of students' pre-post capstone perspectives on global issues.

SMARTERMEASURE LEARNING READINESS INDICATOR

(available through ITTC)

ASSESSMENT OF CRITICAL THINKING AT THE LEVEL OF DEGREE PROGRAM: A CASE STUDY

Program: Marketing BS
Chair: Dr. Gail Hudson

DATA SAY:

Spring 2009, CoB student performance on the Major Field Test (MFT) was above the national average . Analysis of marketing topics revealed weakness in knowledge of services marketing and the marketing communications model.

SO WHAT?

Question-by-question analysis revealed a lack of consistency between MKTG 3013 sections in the level of emphasis placed on services marketing and the marketing communications model.

HOW WE CHANGED:

The marketing faculty agreed on common learning objectives for MKTG 3013 so that students would have a consistent experience across all sections of the course.

WHAT WE GOT:

Results of the Spring 2011 MFT revealed improvement in gap analysis in service marketing and the marketing communications model.

Survey Results:

Students Respond to Senior Exit Survey

Senior Exit Survey (N = 612)

If they had to do it all over again, how many would choose ASU? *502*

How many participated in research with a faculty member? *63*

What they appreciate most about faculty - "concern with student success" *373*

Hired for employment related **(220)** or not related **(50)** to major field of study

Have been accepted for graduate study **(101)**

Is there one, "must take" professor you would recommend? – Kurt Monroe **17**; Dr. David Saarnio **16**; Dr. Shane Hunt **15**; Dr. Kris Biondolillo **12**; Dr. Jackie McBride **11,** and **224** other faculty, each of whom was named by at least one respondent!

How well do you believe you understand global issues such as the current and future implications of the use of resources globally?

Tukey post-hoc comparisons evaluating the main effect of College revealed significant differences between colleges. Scores in the College of Science and Mathematics were significantly lower than the scores in the College of Business (*UG = 5.45; G = 5.0*) and in the College of Humanities and Social Sciences (UG = 5.38, G = 6.33). Scale = 1-7. It appears that students in the College of Humanities and Social Sciences and the College of Business believe that they understand global issues such as the current and future implications of the use of resources globally better than students in the College of Science and Mathematics (mean UG = 4.89)

MEAN = 5.07 SD = 1.04

global issues

How well equipped do you believe you are to interpret and analyze the relevance and quality of information?

Degree Type	Means	Standard Deviations
Undergraduate	**5.81**	.08
Graduate	**5.60**	.25

critical thinking

How well equipped do you believe you are to use technology to locate, process, and evaluate information in an effective and ethical manner?

Degree Type	Means	Standard Deviations
Undergraduate	**5.92**	.07
Graduate	**6.00**	.24

using technology

Self-report of student learning: Does thinking make it so?

Survey Results: Students Respond to National Survey of Student Engagement

Benchmark		Year	ASU	Southeast Public	Carnegie Class
Academic Challenge		Freshman	51	–	–
		Senior	55	–	–
Student-Faculty		Freshman	36	+	+
Interaction		Senior	44		+
Enriching Educational		Freshmen	27	–	–
Experiences		Senior	36	–	–

"-" indicates that ASU's score is lower than the comparison group (p < .05)

"+" indicates that ASU's score is higher than the comparison group (p < .05)

NSSE
National Survey of
Student Engagement

Student engagement, that is, the extent to which college students spend time participating in educationally purposeful activities, is a good predictor of student satisfaction and achievement (Arum & Roksa, 2011; Kuh, 2002; Passcarella, 2001; Astin, 1991). The *National Survey of Student Engagement* (NSSE) is the assessment tool we use at ASU to measure institutional effectiveness in promoting student learning through effective educational practices such as student-faculty interaction, prompt feedback, time on task, and high expectations. Findings concerning the validity, reliability, and other psychometric properties of NSSE are available at http://nsse.iub.edu/pdf/psychometric_framework_2002.pdf.

Since 2007, the response rate for a random sample of ASU students has been about 28% for first-year students and about 37% for seniors. Trend analyses show little variation among 2007, 2010, and 2011 responses to NSSE items.

Benchmarks are weighted scores between 0 and 100. Most institutions score between 15 and 85. The standard error of the mean for scores presented here is between .64 and .85 for each benchmark listed.

A complete report of NSSE findings on Student Engagement is available on the Assessment website; data are posted by Institutional Research.

Assessment as Adverb: Rethink an assessment you're already conducting - Examples from faculty
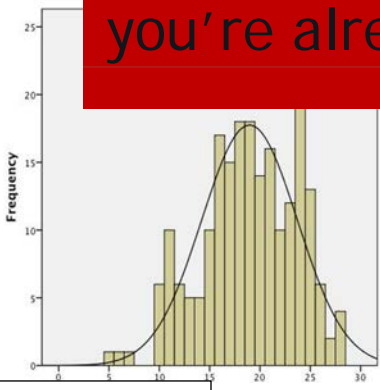
OUTCOME	AG CORE				
Legend: (I) - Introduced, (M) - Mastered, (R) - Reinforced, (X) - Outcome is Assessed	AGRI 1213	AG EC 1003	AN SC 1613	PSS C 1303	AGRI 3233
Agriculture Fundamental Concepts Knowledge - Students will demonstrate knowledge of		I	I		

Department of Theatre:

ADVANCED (9-10 pts)	PROFICIENT (6-8 pts)	LIMITED (3-5 pts)
Objectives and tactics are clearly defined; action has a clear arc; transitions clear; ...	Objectives and tactics are sufficient; arc and transitions are sufficient; believable	Objectives and tactics are not clear; arc is shaky; transitions are confusing; somewhat believable
Sufficient enunciation, and projection; ...	Enunciation and projection are ...	...

Assessment Indicator

Assessment Indicator
Biochemistry and Cell Energetics
Cellular Structure, Organization, Function
Molecular Biology and Molecular Genetics
Biology MFT

CRITICAL THINKING RUBRIC

COB - FINANCE

	RATING SCALE		
	1	**2**	**3**
	NEEDS IMPROVEMENT	**MEETS EXPECTATIONS**	**EXCEEDS EXPECTATIONS**
Identifies, summarizes, and appropriately formulates the problem, ...	Does not attempt to or fails to identify and summarize	Summarizes issues, though some are ... or ... Nu... ke...	Clearly identifies the challenge and subsidiary, embedded, or ... aspects; ...

Data say:
Our clinical preceptors and external ... board members said that CLS ... needed more introduction to ... tion in the laboratory prior to ... ng on clinical rotations. ... t? ...cal rotation is meant to be more ...on training and l... ...eory. If our clini... ...that our students ...for rotations, we ...nt need to modify ...aining to address... **...hanged:** ...ment acquired a... ...es spec...

06/07/2011 - Data from our scoring rubrics for both courses revealed the following findings: 42% of those who completed the BA pro... from Fall 2007 to Spring 2011 sh... substantial skill development, 33% demonstrated an acceptable performance in both courses, 14% performed at an excellent level, 7% declined slightly, and 2% ...iled to meet minimum st... ...e data show...

Course Reviews: Professors of partnership courses conduct reviews of their courses using the "Online Course Quality Checklist" a synthesis of quality indicators from the SREB's November, 2006 "Checklist for Evaluating Online Courses" and "Quality Matters Rubric Standards," 2008-2009 edition. The professor is required to ..., along with a peer, five ...launch of the course each time ...me checklist is also used by ...air and assistant chair to ...our weeks prior to launch. ...ty: Professors conduct inter-

No. 4: Identify, Formulate & Solve Problems
No. 5: Professional and Ethical Responsibility
No. 6: Effective Communications
No. 7: Engineering Impact
No. 8: Life-long Learning
No. 9: Contemporary Issues
No. 10: Skills and Tools for Practice
No. 11: Design to ... Needs

DATA SAY: The redesign of developmental courses and delivery systems has been an ongoing project throughout the United Stated for several years. Research conducted by the Community College Research Center concluded that there were too many "exit points" in developmental reading and writing remediation programs. Multiple layers of remediation caused many students to drop out of college before making it to credit- bearing courses. Subsequently, developmental students were placed at a major disadvantage in terms of educational debt and the accumulations of credits toward graduation. http://www.vccs.edu/portals/0/contentareas/AcademicServices/VCCS_Focal Point_CompleteDocument.pdf)
SO WHAT: Arkansas State University is ... in the Complete ... America initiative. Begin... ...emester, native ...dents requiring ... ...or writing will be

The 2010-2011 faculty rating for storytelling was 4.13, but the Advisory Council mean was 3.8. The 2011-2012 Faculty rating was 4.5. The 2010-2011 faculty rating for story structure was 4.5, but the Advisory Council ...

Assessment
Measure: Written communication w... collected in Strategic Managem... the previous assessment, a rate... included with four CoB faculty rat...

Result/Finding ...raters noted ...vement in ...pects of the ...po... ...ubric ...ference, ...onciseness,

Use of Results/Actions Taken

Related Docume...

...L FITNESS INTERNSHIP

Appearance: appropriately and neatly dressed and groomed
Judgment: maturity decision making
AVERAGE

...ROFESSIONAL ATTITUDE AND ...OMPETENCE

...monstrates sophisticated, ...

Fall Faculty Conference 2011

What can administration do to promote faculty-driven assessment?

- **Release Time**
- **Staff Support**
- **Training & Rubrics**
- **Accessible**
- **Treat as Scholarship**

How would you like to receive findings from campus-wide assessment of student learning?

- **Assessment Website**
- **Faculty List Server**
- **Newsletter**
- **College reports**

"Partner with faculty; don't dictate or belittle."

"Send more faculty to HLC."

"Provide funding for assessment (testing)."

"Don't rush into the latest 'fad' in assessment."

"Provide an assessment person for each college."

"Provide meaningful time to reflect upon assessments."

"I really have no ideas."

Chairs' Forum – January 2012 "Tell me how your faculty feel about assessment."

The Godfather (where the faculty represent Corleone):

We've known each other many years, but this is the first time you ever came to me for counsel or for help. I can't remember the last time that you invited me to your house for a cup of coffee, even though my wife is godmother to your only child. But let's be frank here. You never wanted my friendship. And uh, you were afraid to be in my debt… you didn't need a friend like me. But uh, now you come to me and you say - 'Don Corleone, give me justice.' But you don't ask with respect. You don't offer friendship. You don't even think to call me Godfather.

The Velveteen Rabbit (where the faculty echo the Skin Horse's advice given)

Rabbit: "Does it hurt?" Skin Horse: "Sometimes," said the Skin Horse, for he was always truthful. "When you are Real you don't mind being hurt."
Rabbit: "Does it happen all at once, like being wound up," he asked, "or bit by bit?"
Skin Horse: "It doesn't happen all at once," said the Skin Horse. "You become.   It takes a long time. That's why it doesn't happen often to people who break easily, or have sharp edges, or who have to be carefully kept."

Bruce Lee - "If you spend too much time thinking about a thing, you'll never get it done."

Blink 182 - "Give me one good reason."

	Frequency	Percent
Godfather	6	24.0
Velveteen Rabbit	6	24.0
Bruce Lee	4	16.0
Blink 182	8	32.0
Total	24	96.0
No response	1	4.0
Total	25	100.0

Chairs were asked what format they prefer for faculty development in assessment:

62% of the ratings indicate that the people would like the conference to include hands-on workshops in assessment basics, course-level assessment, and program level assessment. They also wanted faculty led lessons learned and sample protocols and a retreat-style format by department. The highest rated item was the hands-on workshops on program-level assessment

Assessment Resources for Faculty

Conference, Tool, or Technique		Focus	Contact
AAACL State Conference	Fall/Spring	critical thinking	bdoyle@astate.edu
AAC&U STEM, San Diego	Oct 31	integrated learning	aacu.org
AAC&U Boston	Feb 28	integrative gen ed	aacu.org
IUPUI Assessment Institute	Oct 29	basics	kblack@iupui.edu
AALHE National, Lexington	June 3	not announced	info@aalhe.org
Critical Thinking Test	NSF	essay	jwelsh@astate.edu
Proficiency Profile Exam	ETS	math, reading, crit think, writing	ets.org
Major Field Tests	ETS	full list of subjects	ets.org/mft
ACAT field tests	ACAT	full list of subjects	collegeoutcomes.org
Rubrics		Bloom's Taxonomy	rubistar.4teachers.org
AAC&U Rubrics		Higher Ed Rubrics	aacu.org
Writing Multiple Choice Items	webinar	Higher Order Thinking	ITTC
HLC – Chicago , April 5		accreditation	ncahlc.org
Research Practices Inventory		Information Literacy	jwelsh
Global Perspectives Inventory		Global Issues	jwelsh
Using Technology	SmarterMeasure	Technology	ITTC
Communicating Effectively	Grammarly	Writing Skills	ITTC

Assessment Techniques: Embedded questions, one-minute papers, checklists, surveys, e-portfolios, rubrics, standardized exams, juries, supervisor evaluations, behavioral checklists, employer surveys, focus groups, transcript analysis, curriculum mapping

Assessment of General Education- Contacts

The following faculty members participated in AAC&U's 2012 Network for Academic Renewal General Education Conference, New Orleans: Dr. Sue McLarry, Dr. Jeff Jenness, Dr. William McLean, Dr. Kate Krueger, Dr. Monica Ulrich, Dr. Deborah Chappel Traylor, Dr. Cherise Jones-Branch, Dr. Joseph Keys, Dr. Melodie Philhours, Dr. Yvonne Unnold

Additionally, each college has a representative serving on the General Education Committee.

High Impact Activities at ASUJ-Collaborative Learning

ASU faculty are utilizing these evidence-based pedagogies as part of continuous quality improvement in academic excellence. For example, Drs. Kris Biondolillo and David Saarnio, chair of assessment and member of the B.S. psychology curriculum curriculum committee respectively, require all students to complete research and *collaborative classroom presentations* as part of course requirements for the degree

program. Dr. Biondolillo includes these courses as part of curriculum mapping in the assessment of student learning outcomes for the degree program.

Dr. Kris Biondolillo, Chair of Assessment, BS Psychology degree program

High Impact Activities at ASUJ-Service Learning

The College of Agriculture & Technology embeds *Service Learning* activities into degree-program curricula.

In the Fall of 2006, the College of Agriculture & Technology began a free petting zoo on our farm at our beef barn facility. It began on a Friday during mid-October, with the weekday reserved for school groups, and the following Saturday open to the general public. After an overwhelming response, the zoo was expanded to two days (Thurs. & Fri.) for school groups and continues on Saturdays for the public.

In the Spring of 2008, the name was officially changed to the Bill and Alice Nix

Petting Zoo. The Nix's children have created an endowment to assist in supporting this endeavor. Their generosity has helped raise funds for general improvement of the facilities and expanded public relations for the petting zoo.

Students throughout the College of Agriculture & Technology volunteer during the Petting Zoo event each semester. FYE courses in the college direct its members to attend the Petting Zoo,

as well as asking them to volunteer. The Senior Seminar course provides class participation credits for volunteer work at the Petting Zoo. In both of these courses, the College of Agriculture & Technology emphasizes the values of service learning, communication with the public, and agricultural literacy in relation to the Petting Zoo event. Each semester, around 3,000 people visit over three days (two days for school groups and other groups, one day open to the public).

Fall Faculty Conference 2010
Arkansas State University-Jonesboro
August 18, 2010
Faculty Respond: What did you like?
What can we improve?
N=79

1909-2009

Keynote Speaker:
Dr. George Kuh
Founder: National Survey of Student Engagement (NSSE)

Positive Comments

Loved this year's speaker—usually I do not. Practical speakers are the best!

The speaker was excellent. Nice comment about "teaching the students we

have, instead of complaining about the students we wish we had." Nice to see someone present data to support their topic.

I thought that the guest speaker helped us focus on the main work of teaching. Many aspects of his talk were inspiring.

The guest speaker was great! So motivating!

Negative Comments

Although a dynamic speaker, this year's speaker outlined things that are already in place and being done.

I just don't think we had the kind of Q & A we could have had.

The Keynote Speech is pointless. Many ASU faculty members could do the same or better.

Assessment News @ Arkansas State University

Student Engagement @ Arkansas State University-Jonesboro

Dr. G. Daniel Howard, Interim Chancellor, began the Fall 2010 Faculty Conference emphasizing selected institutional priorities. Documenting continuous quality improvement as we seek reaffirmation of campus-wide accreditation topped the list. Committed to measuring evidence-based educational practices, the Office of Institutional Research, Planning,

and Assessment administered the National Survey of Student Engagement (pronounced, "nessie") to 1,737 randomly selected ASU-Jonesboro students in Spring, 2010.

NSSE
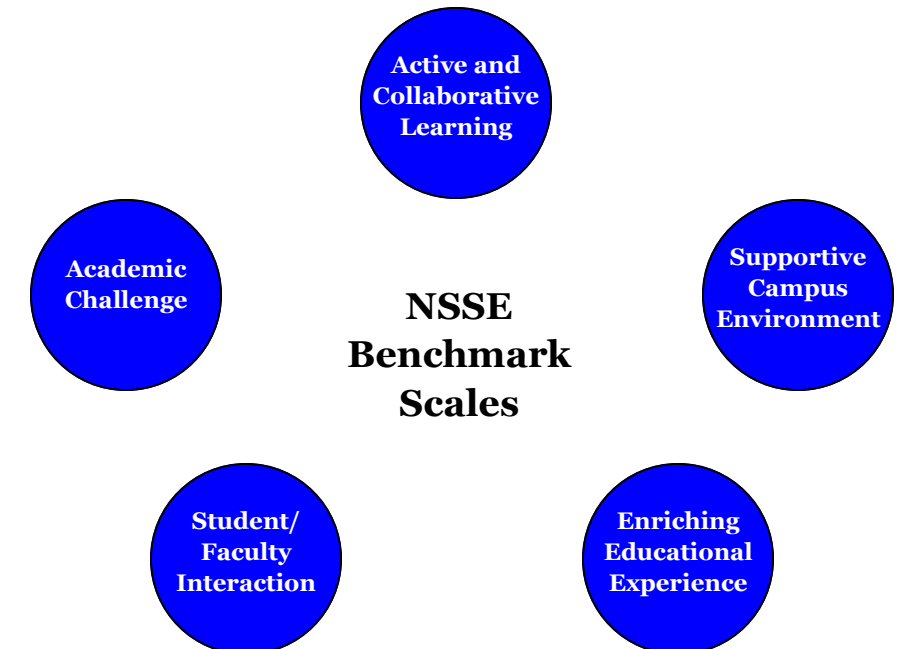national survey of student engagement

Evidence-Based Educational Practices Measured by NSSE

The objective of the NSSE is to obtain annual information from colleges and universities nationwide about student participation in programs and activities that institutions provide for their students' learning and personal de-

velopment. Administered through the Indiana University Center for Postsecondary Research and Planning in cooperation with the Indiana University Center for Survey Research, the NSSE surveys randomly selected freshman and sen-

iors at four-year colleges and universities regarding *the extent to which students engage in educational practices that are associated with high levels of learning and development* (Kuh, 2010).

Active and Collaborative Learning

Academic Challenge

NSSE Benchmark Scales

Supportive Campus Environment

Student/ Faculty Interaction

Enriching Educational Experience

The above NSSE benchmark scales correlate positively with institutional learning goals and outcomes including effective reasoning and problem solving, well being, inclination for lifelong learning, intercultural effectiveness, leadership, and moral character (Pascarella, 2009).

Active and Collaborative Learning (ACL)

This month, we focus on Active and Collaborative Learning at ASU. Overall, ASU students are participating in collaborative learning and service learning projects at about the same rate as comparable Southeast Public Universities; however, ASU should embed more active and collaborative learning opportunities into the curriculum in order to increase student engagement and learning. Offering such opportunities to freshmen has been shown to provide compensatory engagement for traditionally underserved students (Kuh, 2010).

(ACL) Item	Mean Response ASU-J		Mean Response Southeast Public Universities (1 = Never, 2 = Sometimes, 3 = Often, 4 = Always)	
Asked questions in class or contributed to class discussions	Freshmen	2.87	Freshmen	2.83
	Seniors	3.10	Seniors	3.10
Made a class presentation	Freshmen	2.25	Freshmen	2.21
	Seniors	2.70	Seniors	2.72
Worked with other students on projects **during class**	Freshmen	2.54	Freshmen	2.47
	Seniors	2.70	Seniors	2.55
Worked with classmates **outside of class** to prepare class assignments	Freshmen	2.27	Freshmen	2.40
	Seniors	2.74	Seniors	2.77
Tutored or taught other students (paid or voluntary)	Freshmen	1.68	Freshmen	1.71
	Seniors	1.82	Seniors	1.85
Participated in a community-based project (e.g., service learning) as part of a regular course	Freshmen	1.47	Freshmen	1.59
	Seniors	1.71	Seniors	1.76
Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers)	Freshmen	2.79	Freshmen	2.75
	Seniors	2.93	Seniors	2.91

Room for Improvement: ASU-J compared to top 10% and top 50% of NSSE schools

Active and collaborative learning at ASU-J falls short of the mark when we compare our engagement scores to those from institutional peer groups identified by NSSE for their high levels of student engagement:

- institutions with benchmark scores placing them in the top 50% of all NSSE schools in 2010 and
- institutions with benchmark scores in the top 10% for 2010.

NSSE 2010 Benchmark Comparisons With Highly Engaging Institutions Arkansas State University-Jonesboro
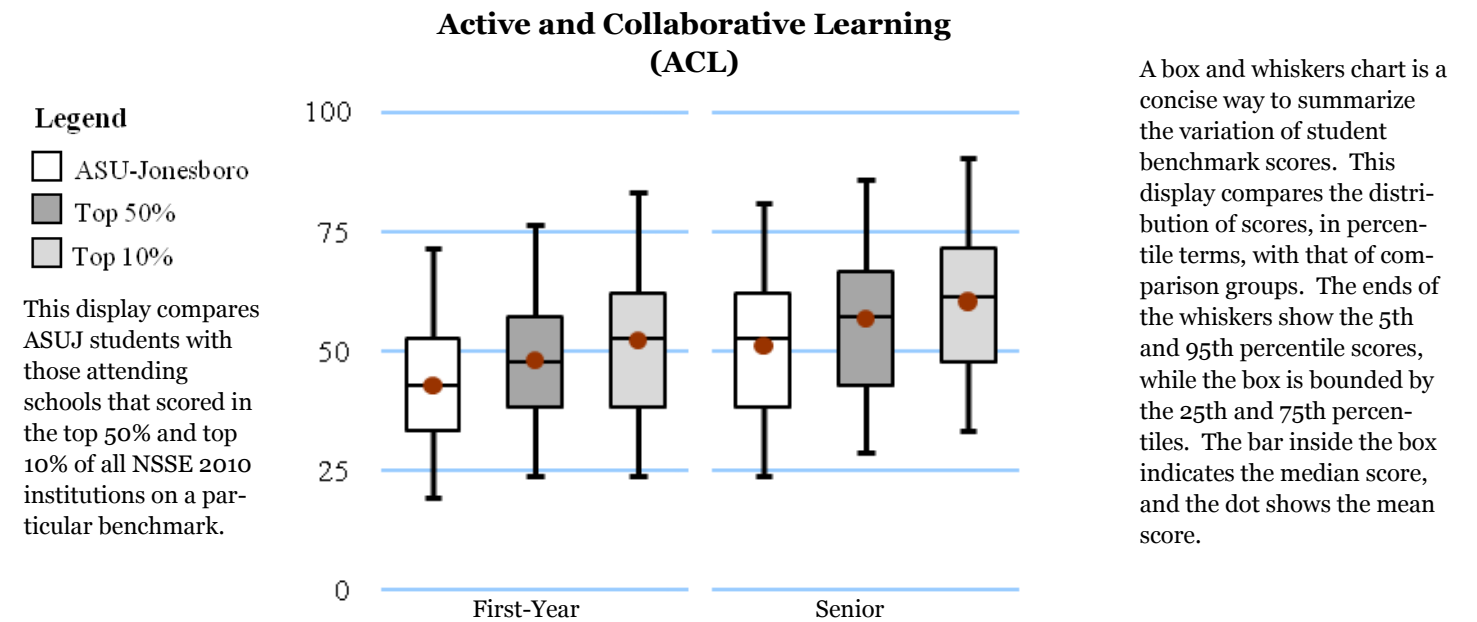
	ASU-Jonesboro	ASU-Jonesboro compared with						
		NSSE 2010 Top 50%			NSSE 2010 Top 10%			
	Mean [a]	Mean [a]	Sig [b]	Effect size [c]	Mean [a]	Sig [b]	Effect size [c]	
First-Year	ACL	42.6	48.1	***	-.32	52.2	***	-.55
Senior	ACL	51.1	56.6	***	-.32	60.3	***	-.52

Note: Each box and whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot shows the benchmark mean.

[a] Weighted by gender and enroll. status (and by inst. size for comp. groups).
[b] * p<.05 ** p<.01 ***p<.001 (2-tailed).
[c] Mean diff. divided by the pooled standard dev.

Active and Collaborative Learning (ACL)

Legend
- ☐ ASU-Jonesboro
- ☐ Top 50%
- ☐ Top 10%

This display compares ASUJ students with those attending schools that scored in the top 50% and top 10% of all NSSE 2010 institutions on a particular benchmark.

A box and whiskers chart is a concise way to summarize the variation of student benchmark scores. This display compares the distribution of scores, in percentile terms, with that of comparison groups. The ends of the whiskers show the 5th and 95th percentile scores, while the box is bounded by the 25th and 75th percentiles. The bar inside the box indicates the median score, and the dot shows the mean score.

High Impact Activities at ASU-Jonesboro

Service Learning and *Collaborative Assignments and Projects* are called HIGH-IMPACT activities because they correlate positively not only with the NSSE scale for Student Engagement but also with the scale called *Deep Integrative Thinking*. Such thinking requires the use of higher cognitive processes such as evaluation and creation along content dimensions such as procedural and metacognitive knowledge as defined in Bloom's Revised Taxonomy of Educational Objectives (Anderson & Krathwonl, 2001).