

OUTCOME ASSESSMENT

Trends Analyses & Discussion

Lock Haven University Days

January 14, 2015

OAC General Education Trends

Thoughtful

Gen. Ed. Outcome

Competency

1.a Thoughtful

Oral Communication

1.a Thoughtful

Written Communication

1.b Thoughtful

Critical thinking

1.c Thoughtful

Information Literacy

1.d Thoughtful

Mathematics

1.e Thoughtful

Multicultural

Trend Analyses: General Education Outcomes Sample Sizes 2011-12, AY2012-13 & AY2013-14

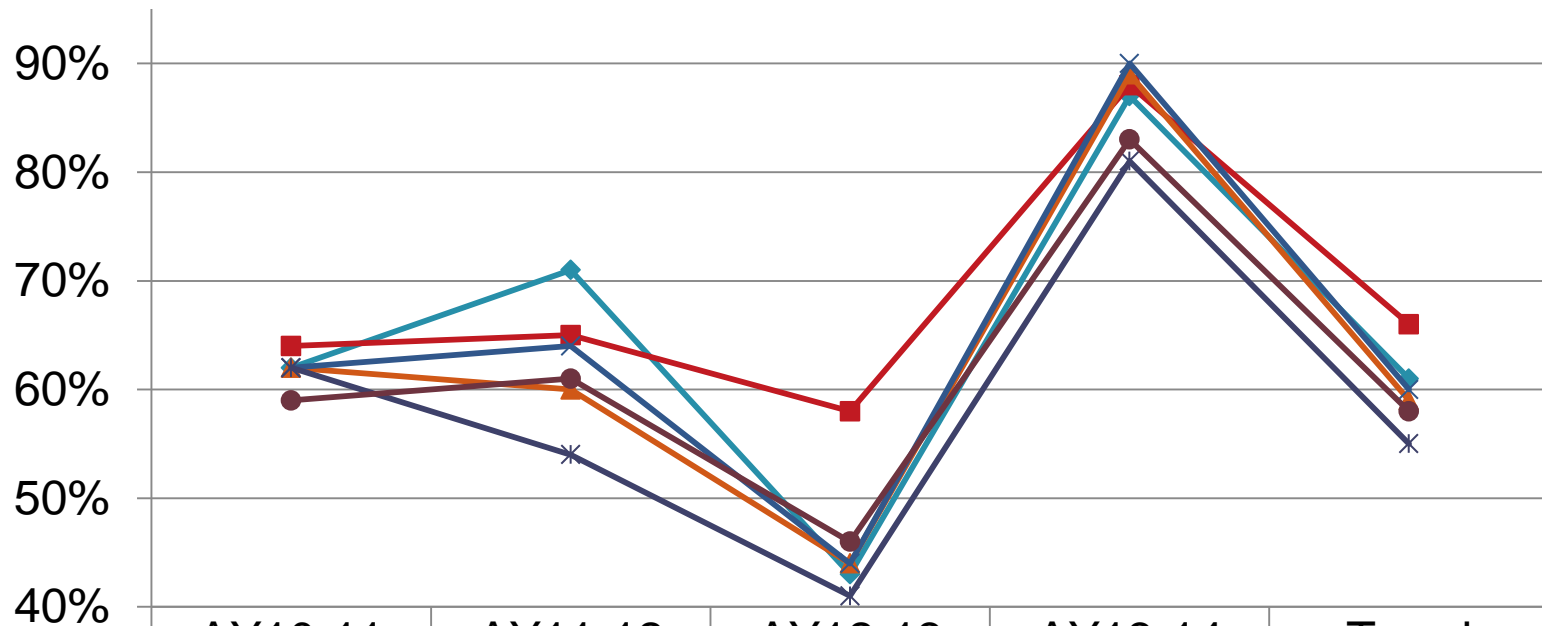
			AY2011-12	AY2012-13	AY2013-14	3-Year Summary
Gen Ed: 1.a	Thoughtful	Written Communication	258 (5%)	203 (4%)	241 (5%)	702 (4%)
		Oral Communication	463(9%)	735 (15%)	349 (7%)	1,547 (10%)
Gen Ed: 1.b	Thoughtful	Critical Thinking	435 (9%)	552 (11%)	301 (6%)	1,288 (8%)
Gen Ed: 1.c	Thoughtful	Information Literacy	358 (8%)	201 (4%)	137 (3%)	696 (4%)
Gen Ed: 1.d	Thoughtful	Mathematics	910 (18%)	677 (14%)	709 (15%)	2,296 (14%)
Gen Ed: 1.e	Thoughtful	Multicultural	511 (10%)	94 (2%)	25 (<1%)	630 (4%)

* Total represents data based on use of competency specific rubric (i.e. writing emphasis and critical thinking)

FA 2011 Undergraduate: 5029
 FA 2012 Undergraduate: 4969
 FA 2013 Undergraduate: 4855

For a 95% confidence level ($p \leq .05$) and a confidence interval of + or - 5, you need a sample size of 356 for a population of 5,000 (assuming random sampling).

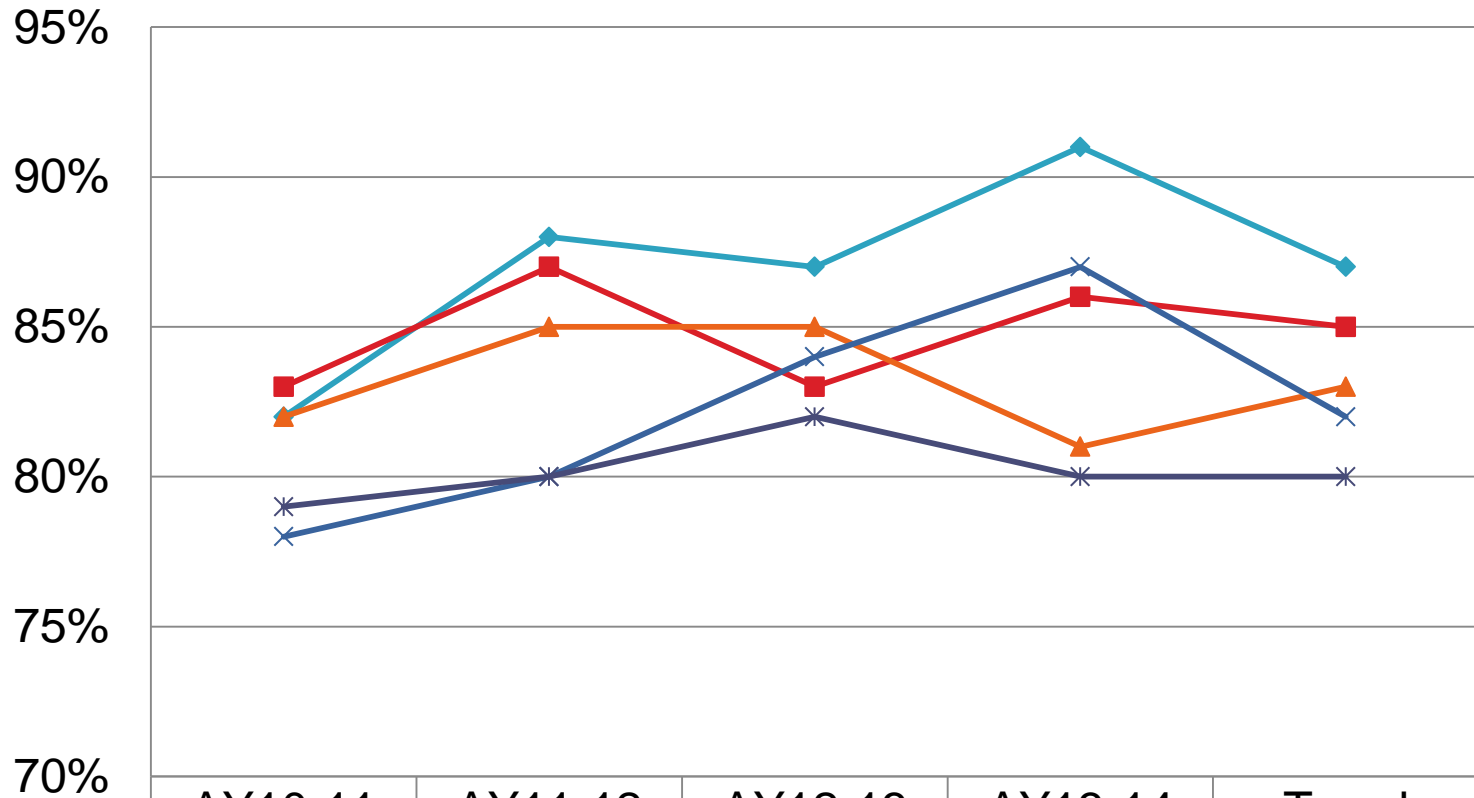
1.a Oral Communication*



	AY10-11	AY11-12	AY12-13	AY13-14	Trend
— Audience	62%	71%	43%	87%	61%
— Organization	64%	65%	58%	88%	66%
— Content	62%	60%	44%	89%	59%
— Presentation Aids	62%	64%	44%	90%	60%
— Physical	62%	54%	41%	81%	55%
— Vocal	59%	61%	46%	83%	58%

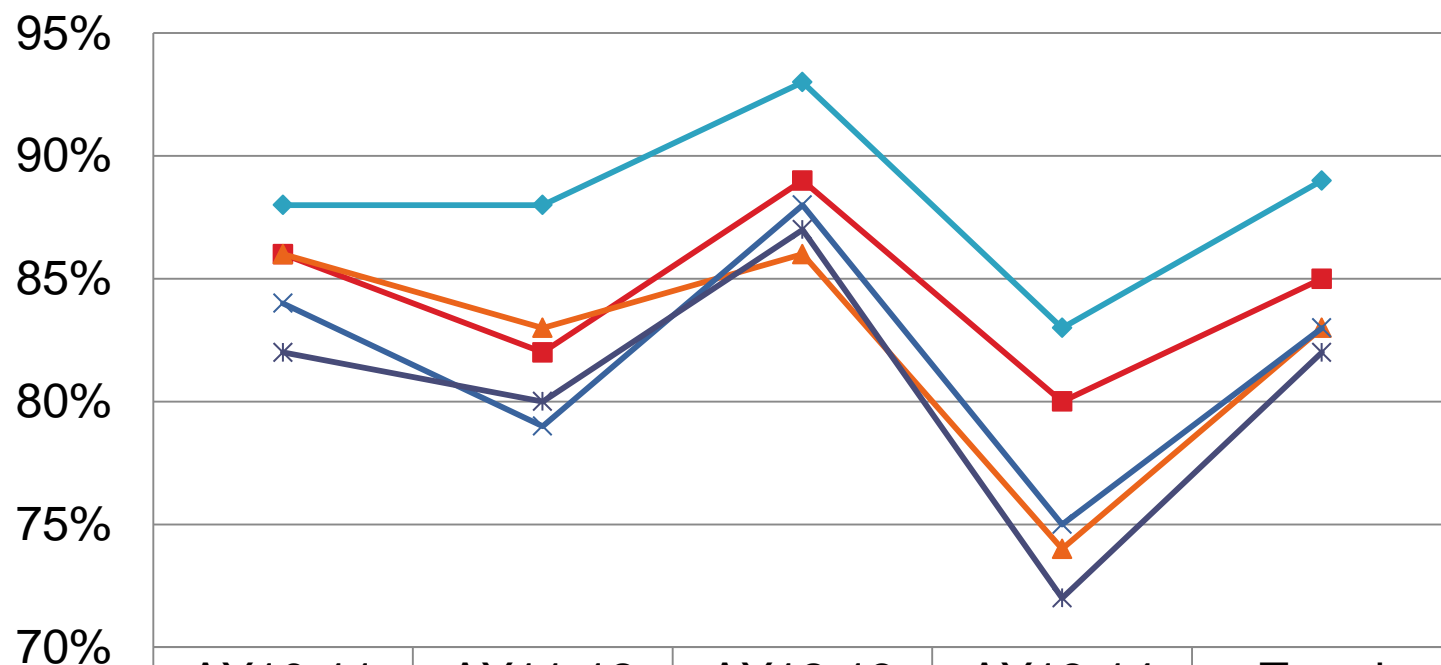
* Percentage of students scoring competent(3) or outstanding(4).

1.a Written Communication



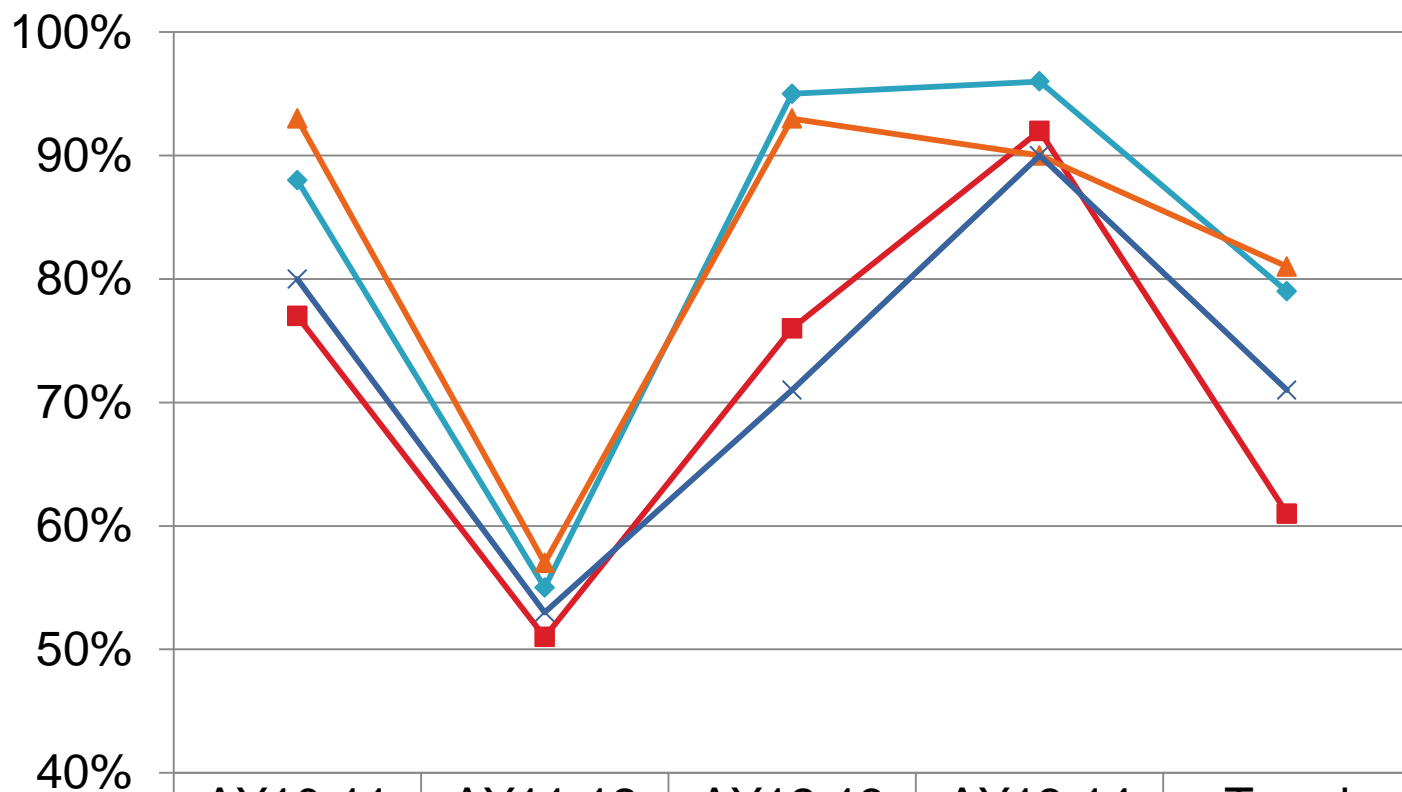
	AY10-11	AY11-12	AY12-13	AY13-14	Trend
◆ Topic	82%	88%	87%	91%	87%
■ Purpose & Evidence	83%	87%	83%	86%	85%
▲ Logic & Organization	82%	85%	85%	81%	83%
× Style	78%	80%	84%	87%	82%
* Mechanics	79%	80%	82%	80%	80%

1.b Critical Thinking



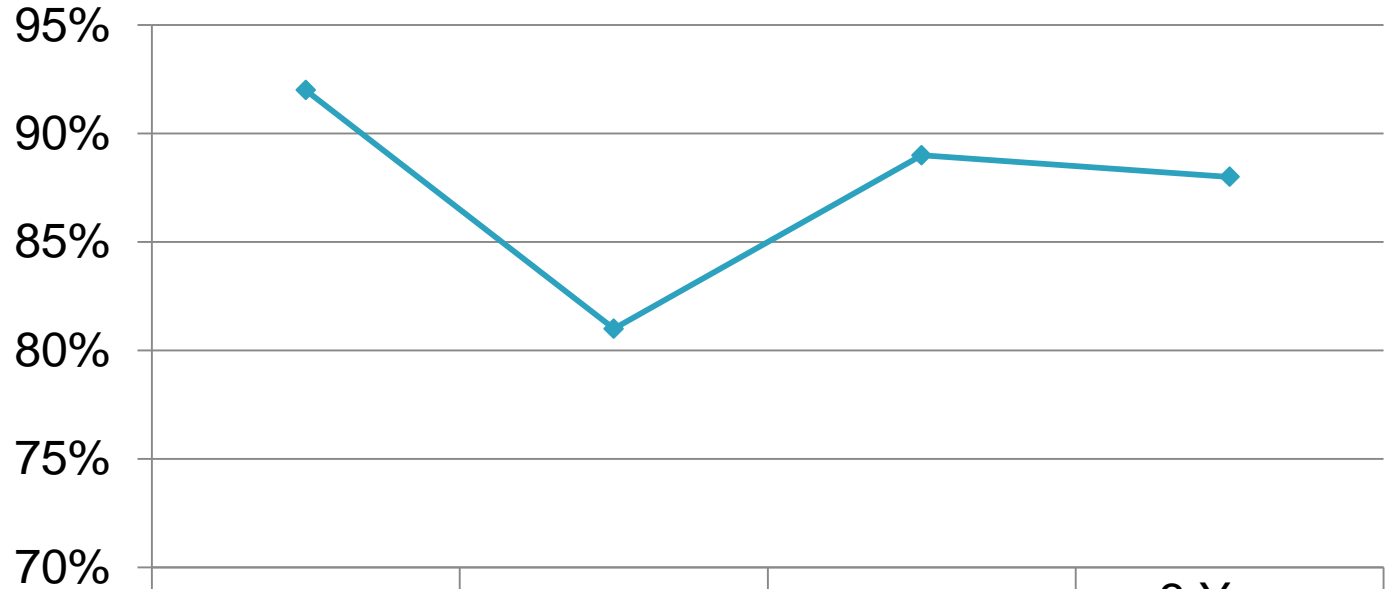
	AY10-11	AY11-12	AY12-13	AY13-14	Trend
Identifies	88%	88%	93%	83%	89%
Assesses Logic	86%	82%	89%	80%	85%
Assesses quality of Evidence	86%	83%	86%	74%	83%
Anticipates Objections	84%	79%	88%	75%	83%
Explores Implications	82%	80%	87%	72%	82%

1.c Information Literacy



◆ Topic Research & Development	88%	55%	95%	96%	79%
■ Search Strategy	77%	51%	76%	92%	61%
▲ Evaluation of Resources	93%	57%	93%	90%	81%
✕ Synthesis & Presentation	80%	53%	71%	90%	71%

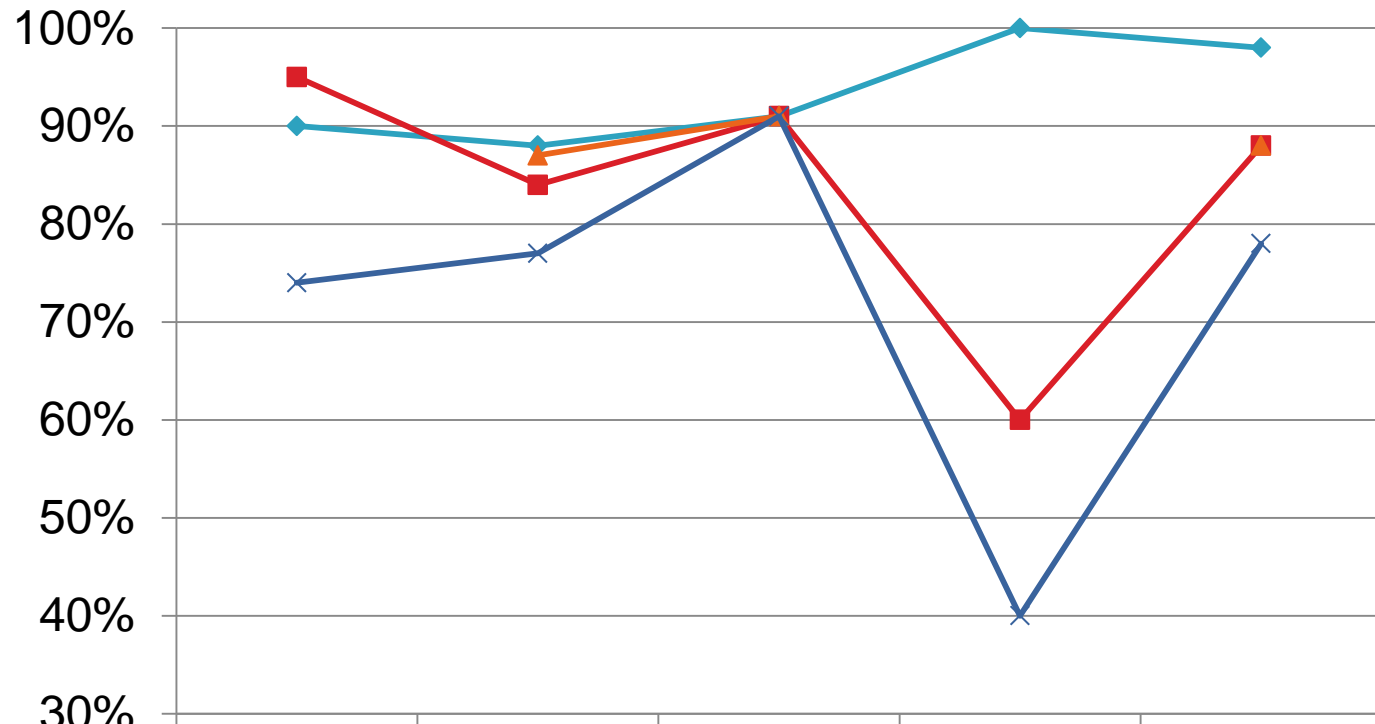
1.d Mathematics



◆ 1. Identifies correct processes for mathematical problem solving; 2. Demonstrates ability to solve problems; 3. Communicates mathematical ideas and solutions

	AY11-12	AY12-13	AY13-14	3 Year Trend
	92%	81%	89%	88%

1.e Multicultural



	AY10-11	AY11-12	AY12-13	AY13-14	Trend
◆ Identification/Analysis Own Culture	90%	88%	91%	100%	98%
■ Identification Analysis Other Culture	95%	84%	91%	60%	88%
▲ Appreciation of Culture		87%	91%		88%
× Analysis of Cultural Events	74%	77%	91%	40%	78%

OAC General Education Trends

Knowledgeable & Responsible

Gen. Ed. Outcome

Competency

2.a Knowledgeable

Humanities

2.b. Knowledgeable

Natural Sciences

2.c Knowledgeable

Social Sciences

3.a Responsible

Wellness

3.e.Responsible

External Experience

Trend Analyses: General Education Outcomes Sample Sizes 2011-12, AY2012-13 & AY2013-14

			AY2011-12	AY12-13	AY13-14	3-Year Summary
Gen Ed: 2.a	Knowledgeable	Humanities	357 (7%)	130 (3%)	172 (4%)	759 (5%)
Gen Ed: 2.b	Knowledgeable	Natural Sciences**	203 (4%) 312 (6%)	474 (10%) 379 (8%)	611 (13%) 550 (11%)	1,288 (8%) 1,252 (8%)
Gen Ed. 2.c.	Knowledgeable	Social Sciences	910 (18%)	801 (16%)	464 (10%)	2,175 (14%)
Gen Ed. 3.a	Responsible	Wellness	286 (6%)	277 (6%)	256 (5%)	819 (5%)
Gen Ed. 3.e	Responsible	External Experience	186 (4%)	185 (4%)	77 (2%)	448 (3%)

** Sample Size indicated; 1) Lecture Concepts; and 2) Scientific Method

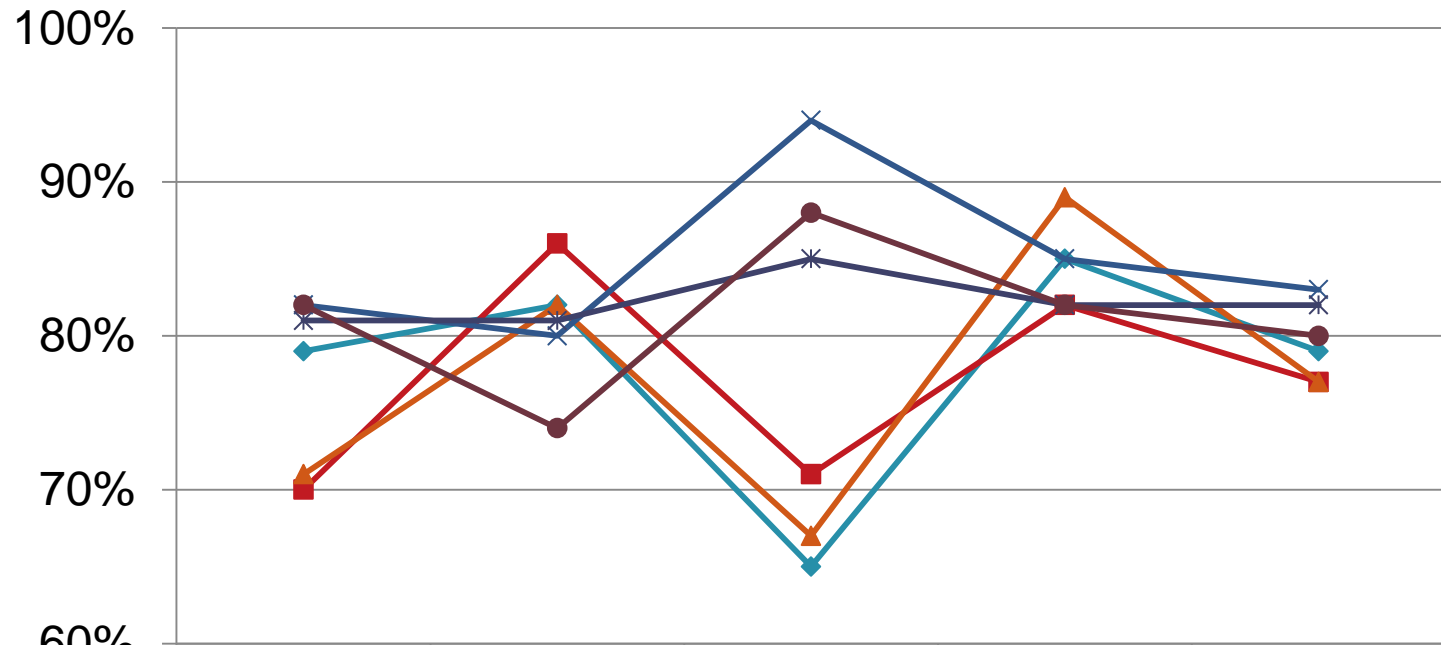
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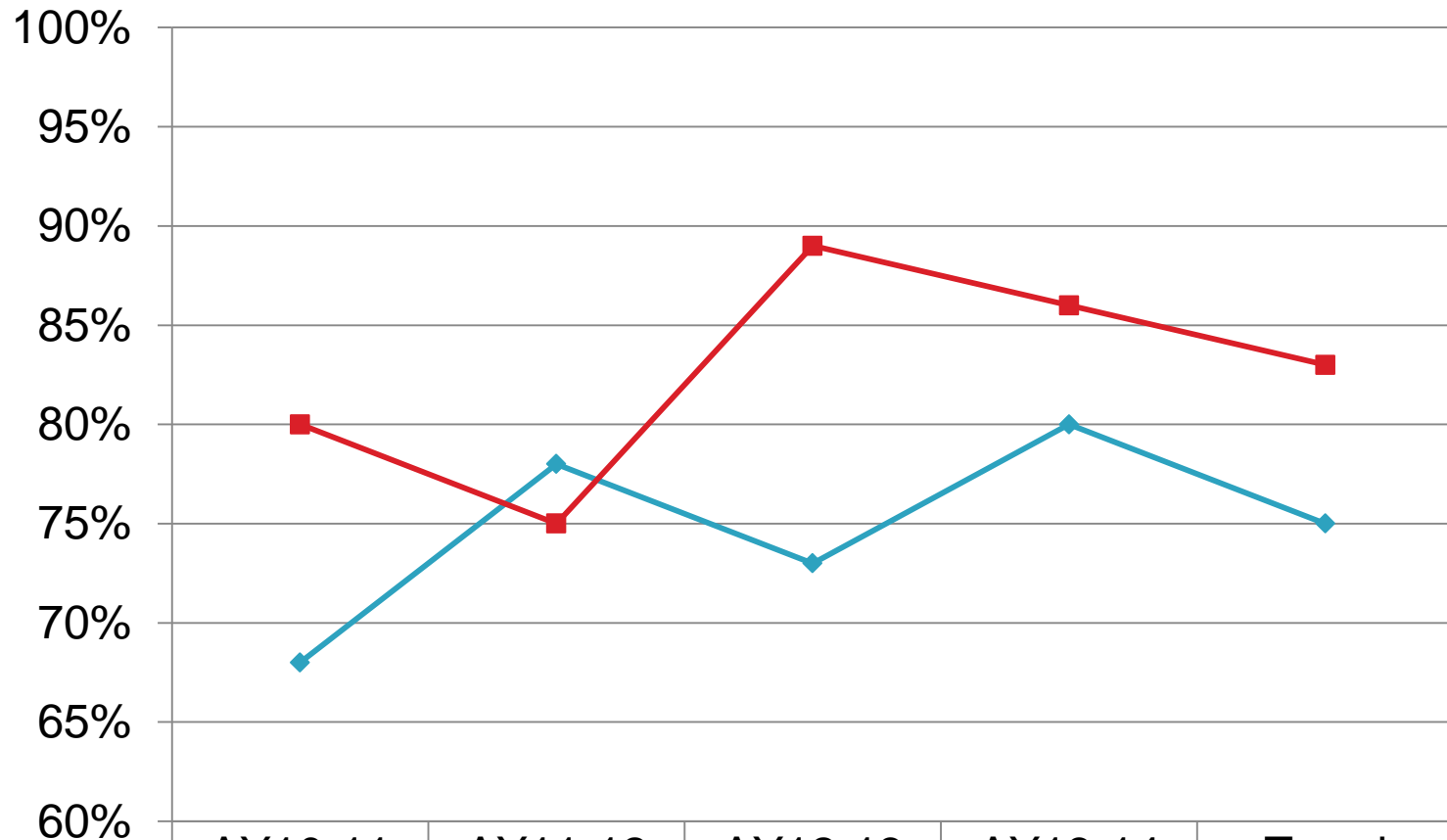
For a 95% confidence level ($p \leq .05$) and a confidence interval of + or - 5, you need a sample size of 356 for a population of 5,000 (assuming random sampling).

2.a Humanities



	AY10-11	AY11-12	AY12-13	AY13-14	Trend
Identifies/Describes	79%	82%	65%	85%	79%
Defines & Applies	70%	86%	71%	82%	77%
Identifies and Classifies	71%	82%	67%	89%	77%
Identifies & Correlates	82%	80%	94%	85%	83%
Applies Method	81%	81%	85%	82%	82%
Engages in Discipline Values	82%	74%	88%	82%	80%

2.b Natural Sciences



◆ Knowledge of Lecture Concepts

■ Application of the Scientific Method

AY10-11

AY11-12

AY12-13

AY13-14

Trend

68%

78%

73%

80%

75%

80%

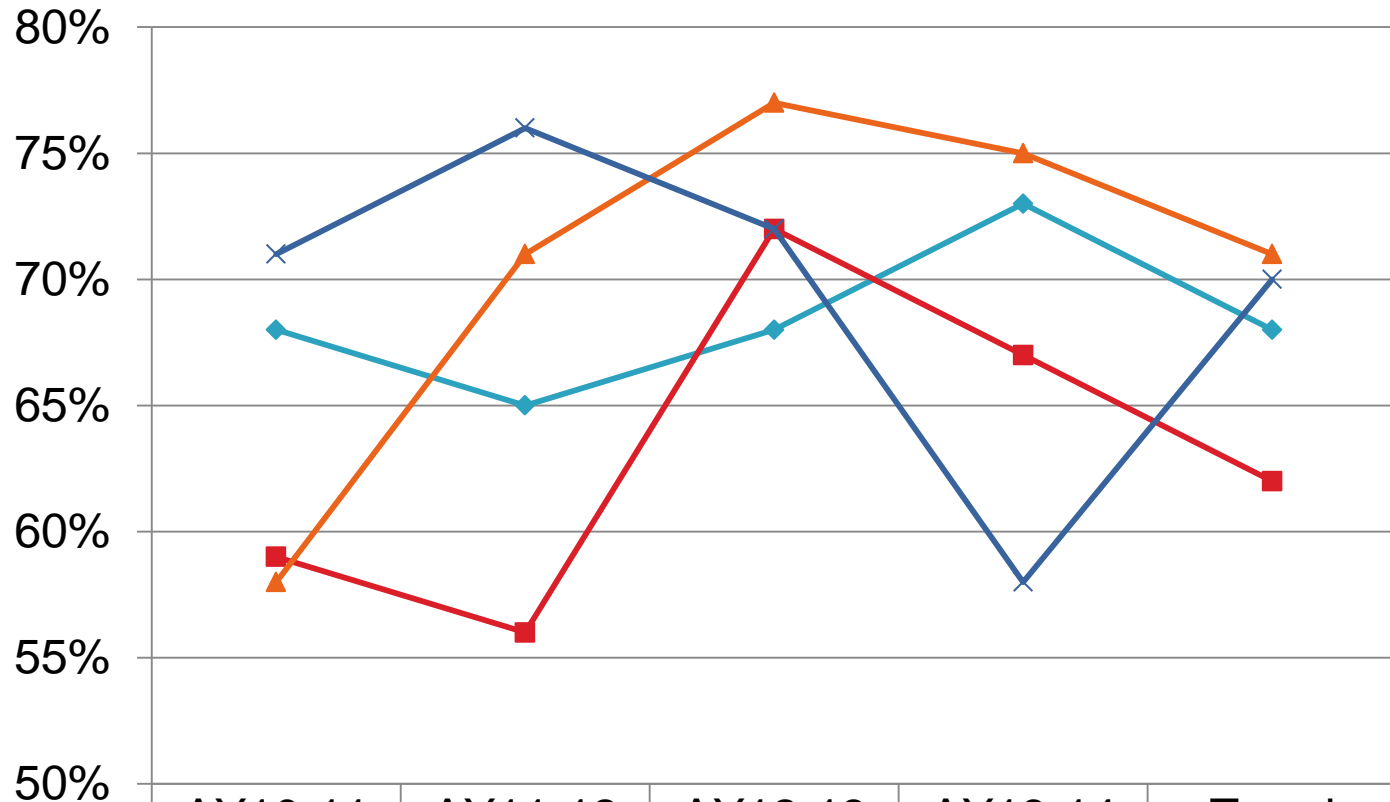
75%

89%

86%

83%

2.c Social Science



◆ Knowledge of Vocabulary

■ Knowledge of Advance Concepts

▲ Application of Theory

× Application of Method

AY10-11

AY11-12

AY12-13

AY13-14

Trend

68%

65%

68%

73%

68%

59%

56%

72%

67%

62%

58%

71%

77%

75%

71%

71%

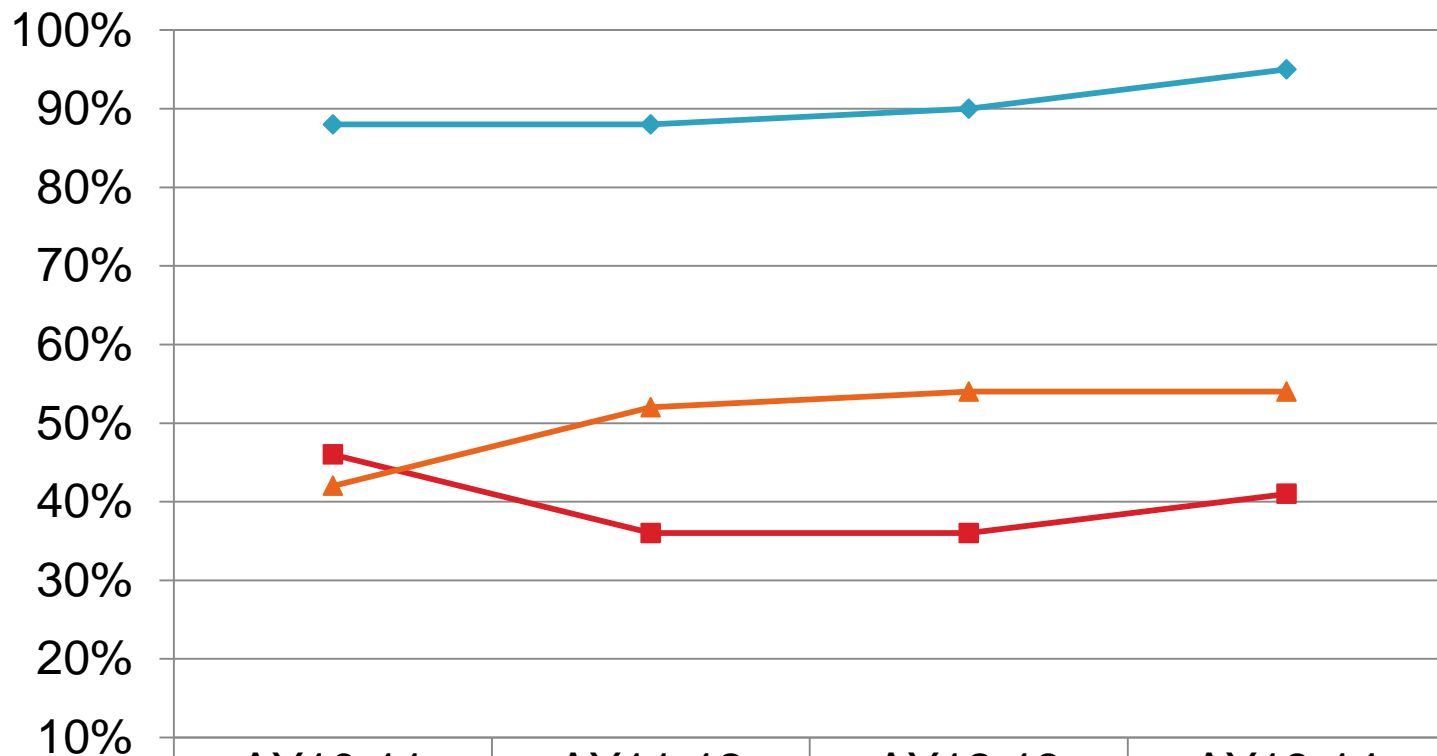
76%

72%

58%

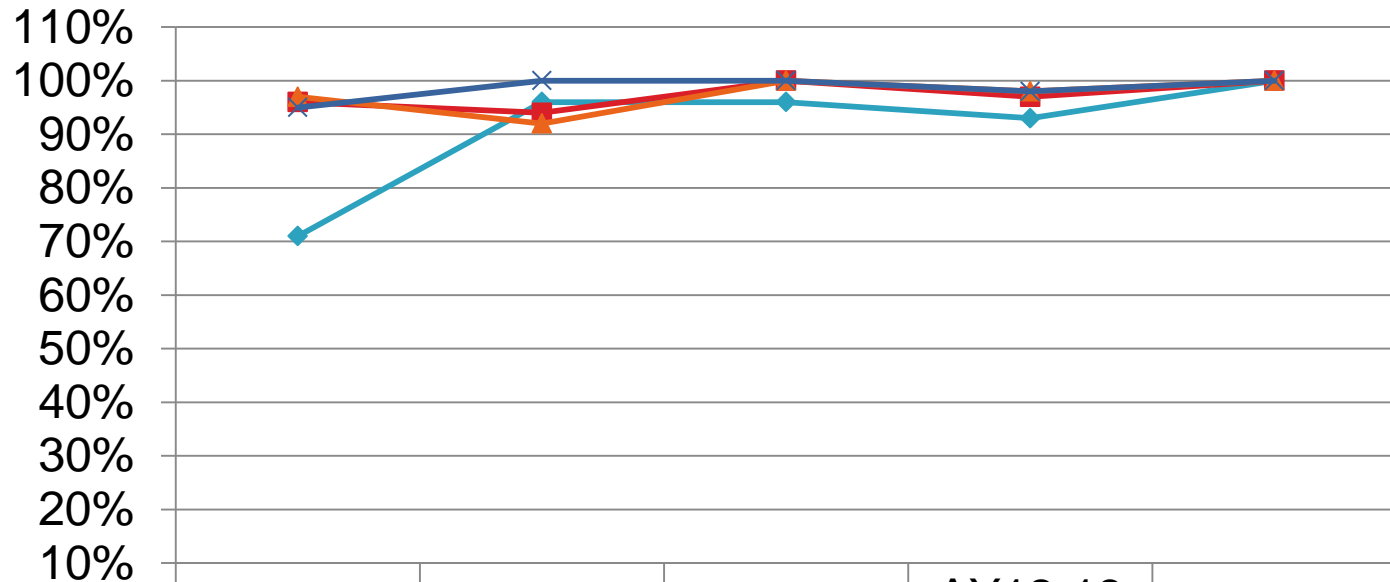
70%

3.a. Wellness



	AY10-11	AY11-12	AY12-13	AY13-14
Percentage of Students Scoring ≥ 2	88%	88%	90%	95%
Percentage of Students Scoring > 2	46%	36%	36%	41%
Percentage of Students Scoring = 2	42%	52%	54%	54%

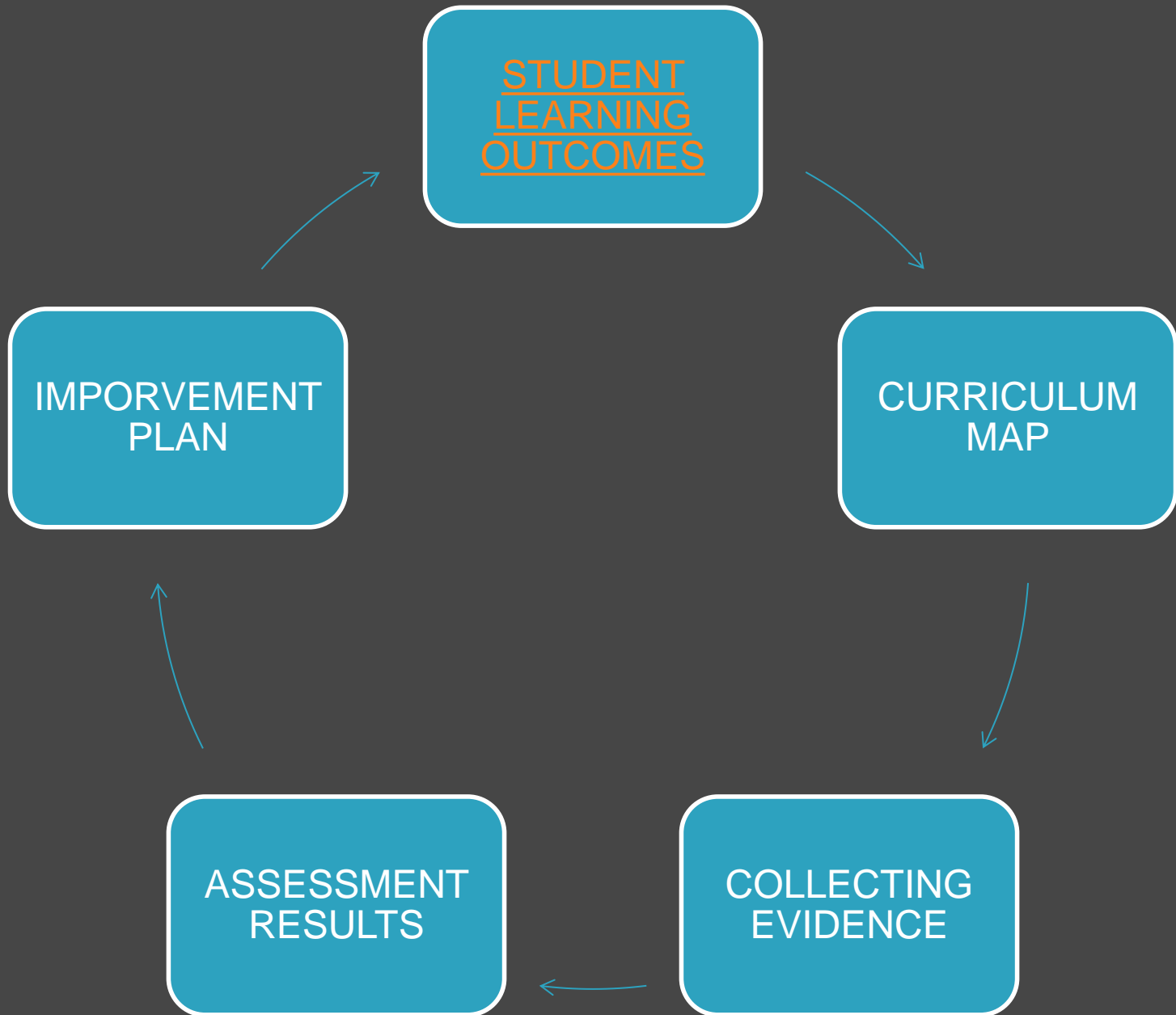
3.e. External Experience



	AY10-11	AY11-12	AY12-13	AY12-13 (sample 2)	AY14-15
◆ Applied Academic Skills outside of Classroom	71%	96%	96%	93%	100%
■ Demonstrates Responsibility	96%	94%	100%	97%	100%
▲ Exercises Appropriate Interpersonal Skills	97%	92%	100%	98%	100%
× Evaluates Personal Goals	95%	100%	100%	98%	100%

CURRICULUM MAPPING

A GRAPHICAL ILLUSTRATION OF THE
RELATIONSHIP BETWEEN A PROGRAM'S COURSE
REQUIREMENTS AND STUDENT LEARNING
OUTCOMES



General Education Competencies

- Written Communication
- Information Literacy
- Oral Communication
- Critical Thinking
- Mathematical and Computational Thinking
- Natural Sciences Inquiry
- Historical, Behavioral and Social Science Inquiry
- Philosophical, Literary, and Aesthetic Inquiry
- Global Awareness and Citizenship
- Ethics
- Wellness
- Experiential Learning

ASSESSMENT'S NEGLECTED SECOND STEP

Matching Program Goals and General Education
Student Learning Outcomes to Curricular Activities

The Basic Curriculum Map: From Intro. To Mastery

Course Requirement	SLO 1	SLO 2	SLO 3	SLO 4
CRS 101	I	I		I
CRS 202	R		I	
CRS 301		R	R	R
CRS 480		M	M	
CRS 490	M	M	M	M

I = Introduced; R = Reinforces or Practices; M = Mastery (Summative)

Curriculum Map

Requirements/ Courses	SLO: Theory	SLO: Research Methods	SLO: Critical Thinking	SLO: Information Literacy	SLO: Communication	
					Written	Oral
CRS 101	I					
CRS 201		I		I		
CRS 224	I			I		I
CRS 300	I			I		I
CRS 340	I		I	I	M	I
CRS 350			R	R		R
CRS 380	R			R		R
CRS 410		M	R	R		R
CRS 420	M		M	M		M
CRS 460	M					

I = Introduce; R= Reinforce/Practice; M=Master; A=Assess

Curriculum Mapping Exercise

- Which courses contribute to General Education Competencies (SLO)?
- Which courses contribute to program level student learning outcomes?
- Can you identify courses (opportunities) for students where:
 - General education competencies/Program SLO's are introduced?
 - General education competencies/Program SLO's are reinforced?
 - General education competencies/Program SLO's are mastered?
- Do students have enough learning opportunities to master each of the competencies?

Curricular Alignment

“Curricular should be designed to ensure that every student, regardless of the particular choices he or she makes in choosing a course of study, has ample opportunity to achieve every key institutional and programing learning goal.” Suskie, (2009)

EVIDENCE OF STUDENT LEARNING

Direct Evidence

Direct and Indirect Evidence of Student Learning

- Direct evidence of student learning is tangible, visible, self-explanatory, and compelling evidence of exactly what students have and have not learned.
- Indirect evidence consists of proxy signs that students are probably learning. Indirect evidence is less clear and less convincing than direct evidence.

Types of Direct Assessments

Traditional Assessments

- Traditional assessments are the kind of tests we are familiar with to include; multiple choice, essay tests and oral examinations. Traditional assessments are conducted in controlled and timed settings.

Performance Assessments

- Performance assessments ask students to demonstrate their skills rather than relate what they have learned (think experiential learning & critical thinking). Performance assessments are increasingly popular because they merge learning and assessment.

Types of Direct Assessments

Embedded Assessments

- Embedded assessments are program, general education or institutional assessments embedded in the course work (think HBSS or PLA). Embedded assessment for general education might be examined in general education courses while embedded assessments for program outcomes would involve only a few (selected) courses.

Add-On Assessment

- Add on assessments occur beyond the course requirements. Students might assemble a portfolio, take a published test or participate in a survey or focus group as an add on assessment.

The Basic Curriculum Map: From Intro. To Mastery

Course Requirement	SLO 1	SLO 2	SLO 3	SLO 4
CRS 101	I	I		I
CRS 202	R		I	
CRS 301		R	R	R
CRS 480		M	M	
CRS 490	M	M	M	M

I = Introduced; R = Reinforces or Practices; M = Mastery (Summative)

The Basic Curriculum Map: Traditional, Performance and Embedded Assessments

Course Requirement	SLO 1	SLO 2	SLO 3	SLO 4
CRS 101	Exam Questions (E)	Class Project (P)		Class Assignment (T)
CRS 202	Exam Questions (T)		Reflective Paper (T)	
CRS 301		Term Paper (T)	Reflective Paper (T)	Class Assignments (T)
CRS 480		Annotated Bibliography (T)		
CRS 490	Comprehensive Exam (T)	Research Paper (P)	Term Paper (T)	Class Presentation (P)

T = Traditional; P = Performance or Practices; E = Embedded

Direct Assessment Exercise

- What kinds of assessment do you perform in your courses?
 - Traditional Assessments, Performance Assessments, Embedded Assessments (explain)
- Based on your experience:
 - What are some advantages of the different assessment types?
 - What are some of the disadvantages?
- How might direct assessments differ depending on whether you are introducing, reinforcing or demonstrating mastery of the competency or learning outcome?
- Are direct assessment distributed (evenly) throughout the curriculum (in your department or discipline)?

CLOSING REMARKS

The OAC will be providing training on the new general education rubrics during Fall 2015 University Days!