Fall 2017
Core Curriculum Assessment Results

of

Skills 1 – Communication

from the

Mathematics
Core Curricular Area

For more information about UA Little Rock Core Curriculum Assessment, please visit:
http://ualr.edu/facultysenate/councils-and-committees-of-the-faculty-senate/council-on-core-curriculum-and-policies/

Assessed Courses

Data for this report was collected from the following Core courses:

MATH 1302 College Algebra
MATH 1321 Quantitative and Mathematical Reasoning

The following Core courses did not submit assessment data for this report:

MATH 1303 Trigonometry
MATH 1342 Applied Calculus I
MATH 1401 Precalculus
MATH 1451 Calculus I
STAT 2350 Introduction to Statistical Methods

NOTE: MATH 1302 is the required prerequisite for the five higher-level courses; therefore, assessment of MATH 1302 already supplies the necessary assessment information for those five higher-level courses. Additionally, MATH 1302 or MATH 1321 are the terminal math courses for many degree programs. The Mathematics program is supplying placement data for assessment for the five courses.

Scoring Rubric

A five-point scoring rubric was used for all data reporting. The table below shows the five levels, the scores assigned to each level, and the general guidelines that Core Area Assessment Committees (CAAC) used to score collected artifacts.

Level	Score	"Assessment of this artifact indicates that the student…"
Advanced	4	**"... was successful at …**
Proficient	3	**"... attempted and was usually successful at …**
Novice	2	**"... attempted but was not always successful at …**
Not Met	1	**"... made little attempt at …**
Absent	0	**"... made no attempt at …**

Data Interpretation Method

The Results presented in this document are reported by Learning Outcome and by Teaching Modality. The arithmetic mean for each level (Advanced, Proficient, Novice, and Not Met) was calculated based on the total number of artifacts that scored at each level divided by the total number of artifacts scored overall, with the number of Absent level artifacts removed from the total.

$$[Level]\ Mean = \frac{Number\ of\ [Level]\ Artifacts\ Scored}{(Total\ Artifacts\ Scored - Number\ of\ \text{Absent}\ Artifacts\ Scored)}$$

The Results for each Learning Outcome and Teaching Modality are presented in tables, pie charts, and radar charts. Total percentages on tables and pie charts sum to 100%, and total values on radar charts sum to 1.0.

Comments

The following comments are specific items noted by the curricular area at the time of data reporting that may affect interpretation of the Results.

1. *One faculty member did not complete their assessment assignment so reliability was not computed in some cases.*

2. *The Math Department Core assessment team decided that a student could not demonstrate **K1_LO#1** (Knowledge 1 – Learning Outcome #1 – Understand mathematical relationships among quantities) without **S1C_LO#3** (Skills 1 – Learning Outcome #3 – Communicate about math precisely orally and in writing). Therefore, both of these Learning Outcomes were scored simultaneously and the same score was used for both.*

Results

By Learning Outcome

The tables and charts in this section show the number of artifacts scored at each level for each Learning Outcome, regardless of Teaching Modality type. Absent values listed are artifacts that were collected but could not be scored.

Learning Outcome 1

Students will use basic mathematical formulas and terminology.

Level	Number of Artifacts	Percentage
Advanced	65	59%
Proficient	26	24%
Novice	15	13%
Not Met	4	4%
Totals	**110**	**100%**

Absent	0

Learning Outcome 2

Students will explain orally and in writing the mathematical "reasonableness" of a statement that is presented as being implied by the data.

Level	Number of Artifacts	Percentage
Advanced	32	33%
Proficient	19	20%
Novice	24	25%
Not Met	21	22%
Totals	**110**	**100%**

Absent	14

Learning Outcome 3

Students will communicate about math precisely orally and in writing.

Level	Number of Artifacts	Percentage
Advanced	60	55%
Proficient	20	18%
Novice	22	20%
Not Met	7	7%
Totals	**109**	**100%**

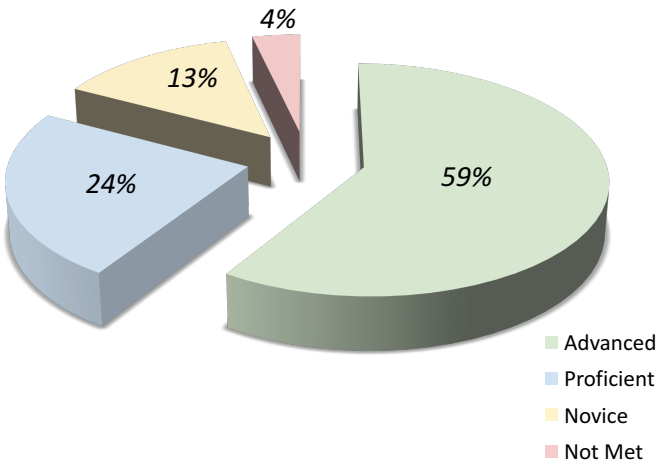
Absent	1

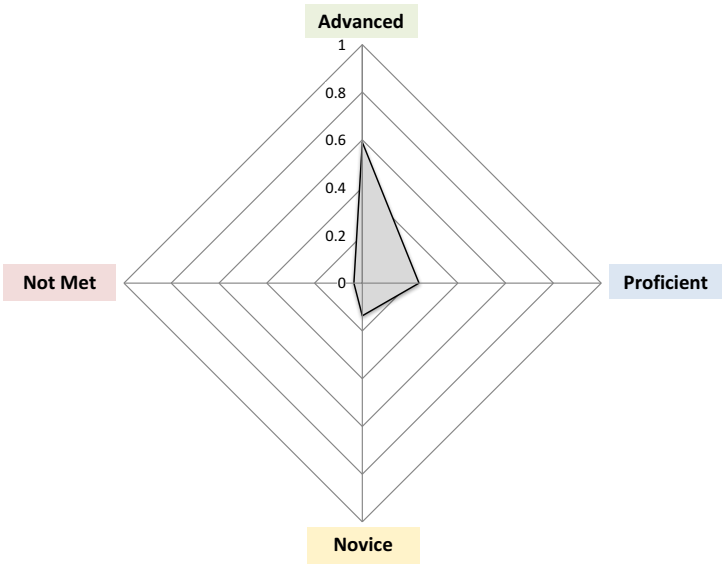
Results

By Learning Outcome

Learning Outcome 1

Students will use basic mathematical formulas and terminology.



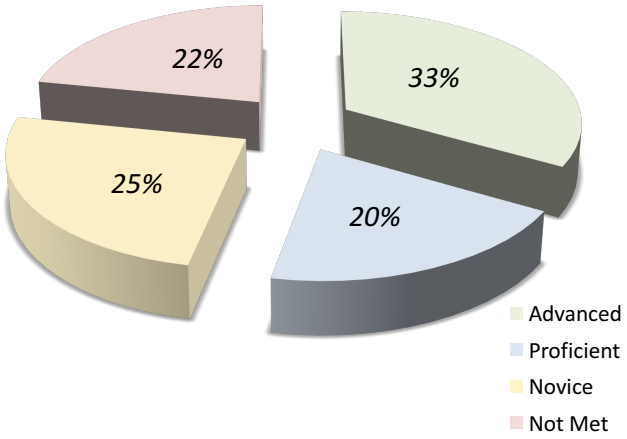


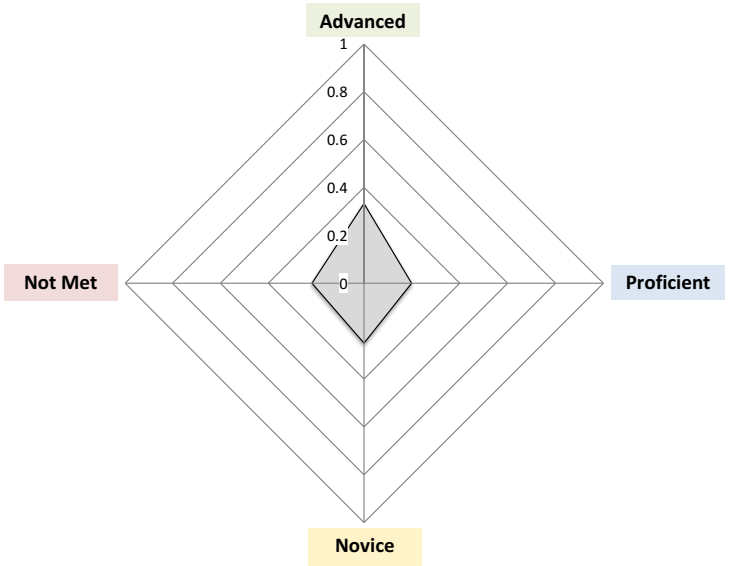
Results

By Learning Outcome

Learning Outcome 2

Students will explain orally and in writing the mathematical "reasonableness" of a statement that is presented as being implied by the data.



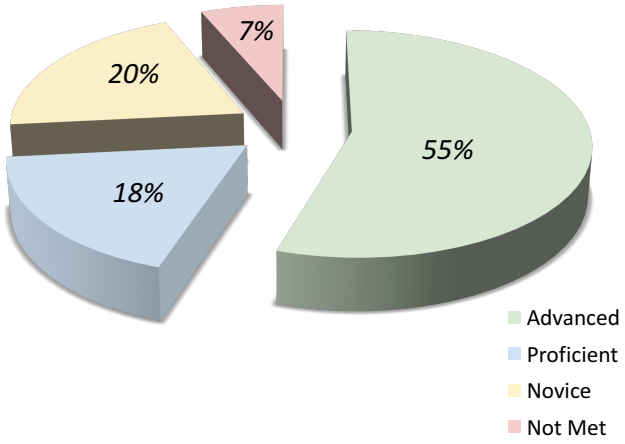


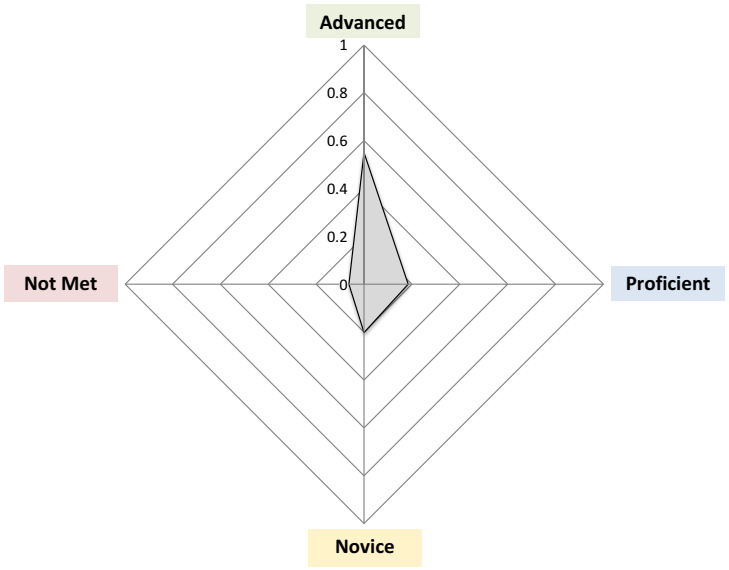
Results

By Learning Outcome

Learning Outcome 3

Students will communicate about math precisely orally and in writing.





Results

By Teaching Modality

The tables and charts in this section show the number of artifacts scored at each level for each Teaching Modality, regardless of Learning Outcome type. Absent values listed are artifacts that were collected but could not be scored.

Face-to-face

Students were taught in a traditional face-to-face classroom setting.

Level	Number of Artifacts	Percentage
Advanced	111	52%
Proficient	43	20%
Novice	40	19%
Not Met	19	9%
Totals	**213**	**100%**

Absent	15

Online

Students were taught in an online teaching setting.

Level	Number of Artifacts	Percentage
Advanced	18	28%
Proficient	18	27%
Novice	18	27%
Not Met	12	18%
Totals	**66**	**100%**

Absent	0

Concurrent

High school students that are enrolled in UA Little Rock Core courses.

Level	Number of Artifacts	Percentage
Advanced	28	78%
Proficient	4	11%
Novice	3	8%
Not Met	1	3%
Totals	**36**	**100%**

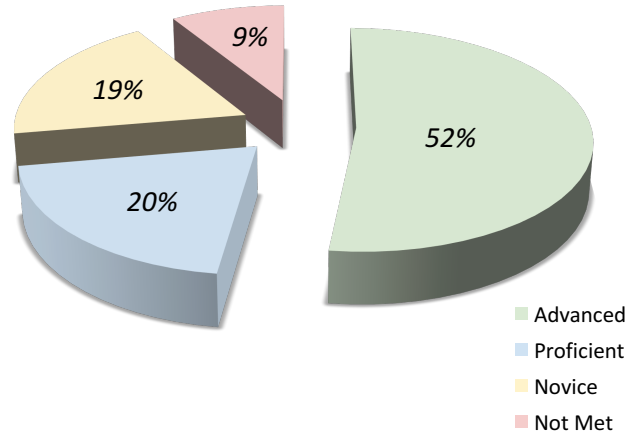
Absent	0

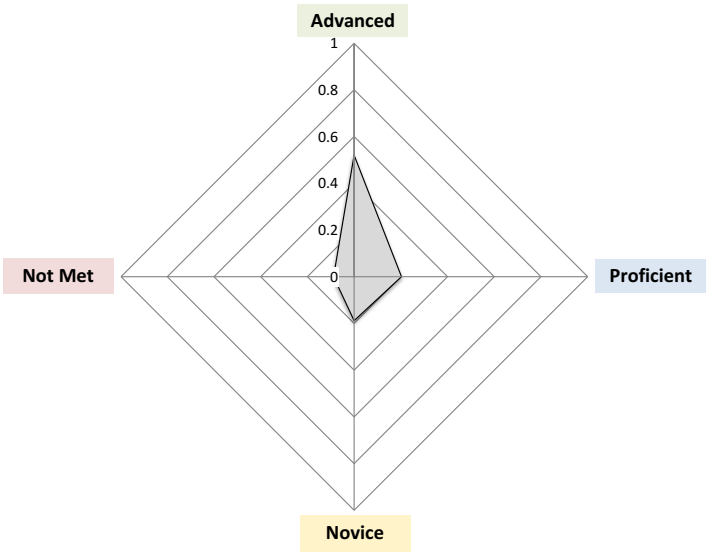
Results

By Teaching Modality

Face-to-face

Students were taught in a traditional face-to-face classroom setting.



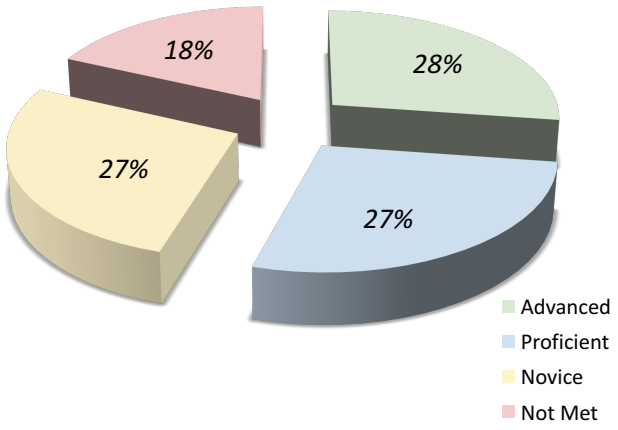


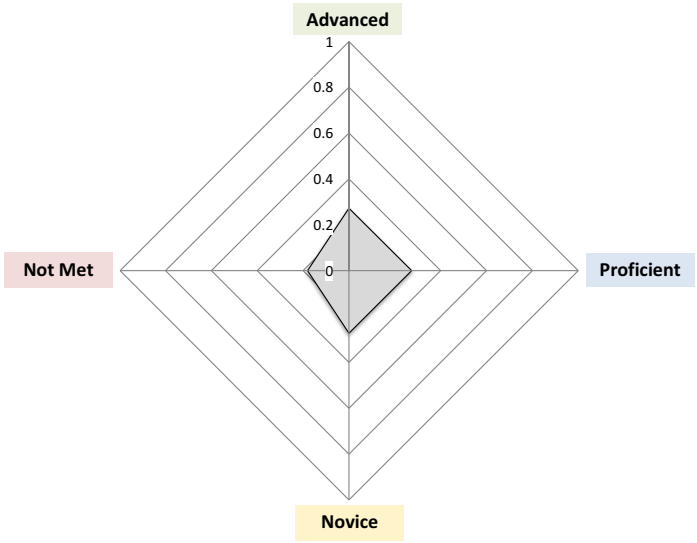
Results

By Teaching Modality

Online

Students were taught in an online teaching setting.





Results

By Teaching Modality

Concurrent

High school students that are enrolled in UA Little Rock Core courses.