

# ENTRY LEVEL ASSESSMENT REPORT 2018-2019

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ROGERS STATE UNIVERSITY  
Claremore, Oklahoma

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Office of Accountability and Academics  
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**ROGERS STATE**  
UNIVERSITY

# Rogers State University

## Annual Report of 2018-2019 Entry Level Assessment

### Executive Summary

Rogers State University (RSU) analyzes college preparedness of all new students – first-time freshmen as well as transfer students. Students’ scores on the American College Test (ACT) are the primary indicator of academic readiness. Transfer students are evaluated using both ACT scores and prior coursework. Students with low ACT sub-scores or no prior coursework receive secondary testing. Based on their performance, students identified as at-risk in one or more basic skills areas are enrolled in appropriate developmental studies courses.

During fall 2018, all entering students were evaluated the basis of ACT scores, secondary testing, or prior coursework. A total of 639 students who were academically deficient in at least one area enrolled in 51 sections of six different developmental courses to prepare them for college-level instruction. This included 144 students in Composition I Supplement, 77 students in Reading I, 392 students in developmental mathematics, and 26 students in Science Proficiency.

Beginning with the fall 2017 semester, RSU implemented a new model for completion of developmental writing and mathematics for students with ACT scores that are marginally below the required ACT of 19 (or equivalent through Accuplacer secondary testing). This initiative has been implemented in conjunction with the Complete College America (CCA) Oklahoma State Regents for Higher Education (OSRHE) *Scaling Co-requisite Initiative*.

Results indicate that the new co-requisite model produces a higher rate of success than the traditional developmental model for both English Composition I and the College Algebra track. Details are discussed in Section I.

**ROGERS STATE UNIVERSITY**  
**Annual Student Assessment Report of 2017-2018 Activity**

**Activities**

**I-1. What information was used to determine college-level course placement?**

The American College Test (ACT) serves as the primary test used to measure levels of student achievement and subsequent entry-level placement at RSU. Testing fees are \$50.50 for the ACT National without the Writing subtest and \$67 with the Writing subtest. Fee for the ACT Residual test is \$47.50. ACT scores of 19 or higher on each subtest are required for enrollment in collegiate level courses. Students who do not meet the cut-score of 19 on each ACT subtest are referred for secondary testing in the deficient content area. RSU Testing Center staff administered the College Board Accuplacer to place students, who are deficient in reading, writing or mathematics, in appropriate developmental courses. The Stanford Science (STASS) test was used as the developmental tool to assess student readiness in science. There is no charge to the student for the Accuplacer or the STASS.

**I-2. What information was used to determine co-requisite course placement (e.g., cut scores, high school GPA, class ranking)?**

The ACT is required of all first-time entering freshmen and students transferring six credit hours or less. Students with ACT scores below 19 are identified as academically at-risk and must complete secondary testing to determine appropriate placement. Secondary testing at RSU consists of the College Board Accuplacer. An Accuplacer score of 80 of the English subtest is required for college level placement in English Composition I. An Accuplacer score of 75 is required on the Reading subtest in order to test out of developmental Reading I. A Math Accuplacer score of 66 is required for college level mathematics with a score of 40 to qualify for the supplemental co-requisite course. A score of 56 on the STASS is required for college level science.

Students whose scores do not qualify them for immediate college-level course work must enroll in a developmental course(s) to prepare them for success. For co-requisite placement in college-level courses simultaneously to developmental coursework, ACT scores of 17 and 18 were initially selected in the pilot year of 2017-2018. However, this range was ultimately expanded with successful results.

**I-3. How were students determined to need remediation deficiencies (e.g., cut scores, multiple-measure metrics, or advising process)?**

First-time entering students are assessed following application to RSU and prior to enrollment. Students who did not meet the cut score of 19 on each ACT subtest were referred for secondary testing at one of the RSU Testing Centers. With the exception of the STASS test, students who did not pass secondary testing on the first attempt could retake the test one time after a one-week waiting period. However, the First Year Experience committee is reconsidering the retesting practice to incorporate a more effective remediation process for the 2019-2020 AY.

**I-4. What options were available for students to remediate basic academic skill deficiencies?**

During the 2018-2019 AY, students were encouraged to refresh their understanding of any content areas in which they were to be tested prior to taking secondary tests by visiting a tutor or reviewing a high school textbook. Students were also provided information on a variety of web-based tutorials and ordering information for *ACT Study Guides*. Course placement is mandatory for all students who do not meet proficiency in one or more of the basic skills. If students did not test into college-level course work, they could either complete deficiencies via co-requisite development coursework simultaneously to enrollment in the relevant college-level course, or they could enroll in a traditional developmental course.

**Analyses and Findings**

**I-5. Describe analyses and findings of student success in developmental, co-requisite and college-level courses (include enrollment counts, grade distribution and overall pass rates), effectiveness of the placement decisions, evaluation of cut-scores, and changes in the entry-level assessment process or approaches to teaching as a result of findings.**

Mean ACT composite scores for first-time entering freshmen have remained stable over over the last five years, with Reading scores consistently the strongest for RSU students. *Table 1: Mean ACT Scores for First-time Freshmen* provides a summary of mean ACT composite and subtest scores.

**Table 1. Mean ACT Scores for First-time Freshmen**

Semester	English ACT	Mathematics ACT	Reading ACT	Science ACT	Composite ACT
Fall 2013 N=760	19.8	19.1	21.2	20.6	20.0
Fall 2014 N=683	20.1	19.4	21.9	21.1	20.5
Fall 2015 N=698	19.8	19.3	22.0	20.7	20.3
Fall 2016 N=629	19.8	19.4	22.0	21.0	20.4
Fall 2017 N=652	20.9	20.1	23.0	21.2	21.0
Fall 2018 N=503	18.5	18.5	21.1	19.7	20.0

*Source: RSU Fall 2018 Fact Book*

There were a total of 639 academically deficient enrollments during fall 2018 for English, reading, mathematics, and science. Table 2 presents these enrollments. Beginning in fall 2017, RSU initiated a new model for completion of developmental writing and mathematics for students with ACT scores that are marginally below the required ACT of 19 (or equivalent through

Accuplacer secondary testing). This initiative has been implemented in conjunction with the Complete College America (CCA) Oklahoma State Regents for Higher Education (OSRHE) *Scaling Co-requisite Initiative*. Initially, students who scored 17 or 18 on the ACT English sub-test (or the Accuplacer secondary placement test equivalent) were eligible to enroll directly in Comp I while simultaneously enrolled in ENGL 0111 – Composition I Supplemental. The supplemental course is an additional one hour of instruction each week designed to address specific competencies intended to mitigate writing deficiencies.

During fall 2018, all entering students were evaluated the basis of ACT scores, secondary testing, or prior coursework. A total of 639 students who were academically deficient in at least one area enrolled in 51 sections of six different developmental courses to prepare them for college-level instruction. This included 144 students in Composition I Supplement, 77 students in Reading I, 392 students in developmental mathematics, and 26 students in Science Proficiency.

**Table 2. Enrollment in Developmental Coursework**

Course Title	Course Number	# Sections	# Students
Composition I Supplement	ENGL 0111	16	144
Developmental Reading I	READ 0114	5	77
College Math Foundations	MATH 0312	4	39
College Algebra Foundations	MATH 0412	12	169
Elementary Algebra Plus	MATH 0114	10	184
Science Proficiency	BIOL 0123	4	26
	<i>6 courses</i>	<i>51 section</i>	<i>639</i>

The Office of Accountability and Academics staff tracked student progress in all developmental courses and appropriate college-level courses by letter grade and retention using the RSU student database. Of particular interest was the new co-requisite model success. Results were tabulated in summer 2019 for the 2018-2019 academic year.

During the 2018-2019 academic year, students who enrolled in Composition I Supplement had a *similar* success rate in Composition I as students who scored lower than 19 on the ACT English subtest but waived the co-requisite with a qualifying score on the Accuplacer. Students who enrolled in Composition I Supplement had a *higher* success rate in Composition I than students who transferred in their developmental writing course from another institution. As anticipated, students who enrolled in Composition I Supplement had a *lower* success rate in Composition I than students who scored 19 or higher on the ACT ENGL subtest and historically (prior to the co-requisite

model) completed Basic Writing ENGL 0003 prior to Composition I ENGL 1113. Table 3 displays the co-requisite and college-level success rates in ENGL 1113.

Although the success rate in Composition I for Basic Writing students was 16% higher than for co-requisite Supplement students, a significantly higher number of co-requisite Supplement students (N = 177) enrolled and subsequently completed Composition I than did Basic Writing in the previous non-co-requisite cohort (N = 63). Students who enrolled in Composition I Supplement had a *higher* success rate in Composition II than students who scored lower than 19 on the ACT.

**Table 3: 2018-2019 Co-Requisite vs. College-level Success in ENGL 1113**

**Composition I**

<b>ENGL 1113 Composition I * Co-requisite/Developmental Status</b>				
<b>Cross-tabulation</b>				
		Co-requisite/Developmental Status		Total
		Co-Requisite	Not Co-Requisite	
	A	26	339	365
	B	44	184	228
	C	35	78	113
	D	13	31	44
	F	41	66	107
	W	18	39	57
<b>Total</b>		177	737	914

**Table 4: 2018-2019 Co-Requisite vs. College-level Success in ENGL 1213**

**Composition II**

<b>ENGL 1213 Composition II * Co-requisite/Developmental Status</b>				
<b>Cross-tabulation</b>				
		Co-requisite/Developmental Status		Total
		Co-Requisite	Not Co-Requisite	
	A	16	254	270
	B	18	108	126
	C	8	45	53
	D	8	16	24
	F	10	28	38
	W	4	26	30
<b>Total</b>		64	477	541

Finally, students who enrolled in Composition I Supplement had a *lower to slightly lower* success rate in Composition I than students who scored 19 or higher on the ACT ENGL subtest and historically (2016-2017) completed Basic Writing ENGL 0003 prior to Composition I ENGL 1113 or transferred in their developmental writing course from

another institution. Notwithstanding the difference in success rates in Composition II, co-requisite students in 2018-2019 successfully completed Composition II in greater numbers within the same academic year than all comparison groups except the students with ACT ENGL subtest scores of 19 or higher. These results suggest that completion of Composition I is a strong indicator of student persistence. It further suggests that co-requisite education in Composition I is related to student success. Analysis of placement test score and course success suggests that students with MATH ACT subtest scores as low as 15 can succeed with the co-requisite model.

RSU fully implemented an advisement culture in spring 2017 that segregates advisees into STEM and non-STEM tracts and places students in a mathematics sequence appropriate to their career aspirations. Figure 1 presents this model for all RSU degree programs.

**Figure 1. Stem versus non-STEM Mathematics Pathways**

MATH 1513 College Algebra or MATH 1715 Precalculus	MATH 1503 Math for Critical Thinking
BS Biology	BS Organizational Leadership
BS Nursing RN-BSN	BS Sport Management
BS Business Administration	BS Business Information Tech
BS Game Development	BS Justice Administration
AS Biology	BT Applied Technology
AS Physical Science	BA Communications
AA Accounting	BA Liberal Arts
AA Business Administration	BFA Visual Arts
	BA History
	BA Military History
	BA Public Affairs
	BA Social Entrepreneurship
	BS Community Counseling
	BS Elementary Education
	BS Social Science
	Bachelor of General Studies (College Algebra is required for Biology and Chemistry minors)
	AA Criminal Justice Studies
	AS Computer Science
	AA Liberal Arts
	AA Secondary Education
	AA Social Studies Education
	AA Social Sciences
	AA Elementary Education
	AA Social Science

During 2018-2019 students who enrolled in College Algebra Foundations had a *similar* success rate in College Algebra as students who scored lower than 19 on the ACT Math subtest but waived the co-requisite with a qualifying score on the Accuplacer and students who historically (the previous three years) completed Elementary Algebra and Intermediate Algebra prior to College Algebra. Students who enrolled in College Algebra Foundations had a *higher* success rate in College Algebra than students who transferred in their developmental math course from another institution. Students who enrolled in College Algebra Foundations had a *lower* success rate in College Algebra than students who scored 19 or higher on the ACT Math subtest. Table 5 presents a comparison of co-requisite and non co-requisite group success in College Algebra.

Students who successfully completed both Foundations and College Algebra persisted from fall 2017 to fall 2018 at a rate of 70%. This compares favorably to an overall fall-to-fall persistence rate at RSU (fulltime and part-time students who are bachelor and associate degree-seekers) of 57%. This also compares favorably to an IPEDS fall-to-fall first-time, full-time bachelor degree-seeking retention rate of 65%.

**Table 5: College Algebra: Comparison of Co-Requisite vs. Non Co-Requisite Groups**

		College Algebra Groups		Total
		Co-Requisite Group for College Algebra	Non Co-Requisite Group for College Algebra	
MATH 1513 College Algebra	A	26	165	191
	B	49	138	187
	C	67	101	168
	D	29	60	89
	F	62	78	140
	W	34	41	75
Total		288	631	919

Students who enrolled in College Math Foundations had a *similar* success rate in Mathematics for Critical Thinking as students who Scored lower than 19 on the ACT Math subtest but waived the co-requisite with a qualifying score on the Accuplacer and historically (the previous three years prior to co-requisite implementation) completed Elementary Algebra and Intermediate Algebra prior to College Algebra.

Students who enrolled in College Math Foundations had a *higher* success rate in Mathematics for Critical Thinking than students who transferred in their developmental math course from another institution. Students who enrolled in College Math Foundations had a *lower* success rate in Mathematics for Critical Thinking than students who scored 19 or higher on the ACT Math subtest. No student who enrolled in a traditional section of Elementary Algebra or Intermediate Algebra in 2017-2018 also completed Mathematics for Critical Thinking.

**Table 6: College Algebra: Comparison of Co-Requisite vs. Non Co-Requisite Groups**

Math for Critical Thinking		Co-Requisite Group for Critical Thinking	Non Co-Requisite Group for Critical Thinking	Total
		A, B, C	34	34
	D, F	19	27	46
	W	13	18	31
Total		66	79	145



There is an anomaly present for student success in College Math Foundations and Math for Critical Thinking. It is possible that specific teaching practices may be affecting success in this course, and this is under review.

Developmental course student success was also evaluated using the university-wide assessment process, which involves faculty discussion regarding results. Each fall semester, faculty submits a summary Student Learning Report (SLR) based on these results from the previous academic year. Results are posted on the N: drive for access and on the Assessment webpage. They are peer reviewed each spring semester by University Assessment Committee members.

For Developmental Math and Science Proficiency, the performance standard was set at the level of 70% of students achieving a minimum of 70% of competencies. Five out of six benchmarks were met or exceeded. For Developmental Reading and Writing, one of two benchmarks met the 70%/70% standard. Although the average post-test was 56%, this is significantly higher than the three year average post-test score prior to the implementation of the co-requisite model.