ENTRY LEVEL ASSESSMENT REPORT
2020-2021

ROGERS STATE UNIVERSITY
Claremore, Oklahoma

Office of Accountability and Academics
December 3, 2021
Rogers State University
Annual Report of 2020-2021 Student Assessment Activity
Executive Summary

Entry-Level Assessment and Course Placement

Rogers State University (RSU) analyzes college preparedness of all new students – first-time freshmen as well as transfer students. Although RSU has implemented a pilot Test Optional Initiative beginning fall 2021, this did not apply to developmental placement in 2020-2021. Students’ scores on the American College Test (ACT) were 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 received secondary testing using the Accuplacer Next Generation. Based on test performance, students identified as at-risk in one or more basic skills areas were enrolled in appropriate developmental studies courses.

A total of 402 students who were academically deficient in at least one area enrolled in 41 sections of six different developmental courses to prepare them for college-level instruction. This equates to 24.1% fewer developmental sections and 32.2% fewer developmental students than in fall 2019. This change is due in part to adoption of the Accuplacer Next Generation inventory as RSU’s secondary placement test, which is significantly more likely to place students directly in college-level mathematics and English without co-requisite/supplemental requirements. This results in a lower success rate in the supplemental course, as only students with lower test scores are being placed in the developmental math and English courses.

For students who were referred to a co-requisite mathematics course in 2020-2021, 21.4% enrolled in one or more co-requisite math courses for a total of 34.7% of first-time freshmen requiring mathematics remediation. A total of 44.2% of math co-requisite students passed their credit level math course while enrolled in their co-requisite math supplemental course/lab. It is important to note that three times more students passed their college-level math course if they were enrolled in a co-requisite course than in a traditional developmental math course. In 2020-2021, 7.6% of FTE students were referred to a co-requisite English course, and 67.5% of these enrolled in a co-requisite college credit level English class. A total of 25.9% passed their credit level English course while enrolled in the co-requisite supplemental course/lab. RSU did not offer non-co-requisite developmental English classes during that academic year. All nine co-requisite English sections were supplemental to Composition I.
Activities

I-1. **What information was used to determine college-level course placement?**
During 2020-2021, the American College Test (ACT) served as the primary test used to measure levels of student achievement and subsequent entry-level placement at RSU. Testing fees are $55 for the ACT National without the Writing subtest and $70 with the Writing subtest. Fee for the ACT Residual test is $55. 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 Next Generation to place students, who are deficient in reading, writing or mathematics, in appropriate developmental courses. The University also accepts classic Accuplacer test results. 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. **How were students determined to need remediation?**
In 2020-2021, the ACT was required of all first-time entering freshmen and students transferring six credit hours or less. Students with ACT scores below 19 were identified as academically at-risk and required to complete secondary testing to determine appropriate placement. A Next Generation score of 250 on the English subtest or score of 80 on the classic Accuplacer English subtest is required for college level placement in English Composition I. A Next Generation subtest score below 250 qualifies a student to enroll in the Composition I Supplemental course concurrently with Composition I.

For students scoring below 19 on the ACT Reading subtest, a Next Generation score of 250 on the Reading subtest equates to college-level reading. A classic Accuplacer score of 75 is required on the Reading subtest in order to test out of developmental Reading I.

A Math Next Generation subtest score of 250 or a classic Accuplacer subtest score of 66 places students in college-level mathematics. A Next Generation subtest score of 236-249 or a classic Accuplacer subtest score of 40-65 places students in supplemental math, allowing them to enroll concurrently in a corresponding college-level math course. A Next Generation math subtest score of 0-235 or a classic Accuplacer score below 40 requires Elementary Algebra.

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.
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.

I-3. What options were available for identified students to complete developmental education within the first year of 24-college-level credit hours?

RSU offers both traditional developmental and co-requisite mathematics remediation, co-requisite English/Writing courses, and traditional developmental Reading and Science remediation. Mathematics is the most commonly needed remediation. By instituting the co-requisite remediation model into students’ first-year experience for those who require it, these students are significantly more likely to complete all developmental education within their first year.

I-4. What information was used to determine co-requisite course placement (e.g., cut scores, high school GPA, class ranking)?

As described in I-2 above, the ACT was the primary placement tool used during the 2020-2021 AY. However, in spring 2021 RSU was approved by the Oklahoma State Regents for Higher Education to participate in the Test Optional Pilot Initiative, and in fall 2021, high school GPA and Accuplacer Next General test scores are being taken into consider for placement.

With regard to 2020-2021, if students did not place directly into college-level courses after completing the Accuplacer Next Generation, they 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.

I-5. Describe the method used to place “adult” students who do not have ACT/SAT scores.

In 2020-2021, RSU required all students to complete the ACT or SAT. An ACT score of 19 on the composite test or equivalent score on the SAT was required for a student to be eligible to declare a major in a bachelor degree program. Students with ACT composite scores below 19 selected associate degree level majors until required remedial course work was completed.
In December 2020, RSU applied to the Oklahoma State Regents for Higher Education to be considered for the Test Optional Pilot Initiative. Approved during spring 2021, the University is moving forward with a pilot initiative to use a selection and placement algorithm which emphasizes high school GPA and Accuplacer Next Generation test scores to accurately place students and facilitate access.

### Analyses and Findings

I-6. Describe analyses and findings of student success in developmental and college-level courses, effectiveness of the placement decisions, evaluation of multiple measures, and changes in the entry-level assessment process or approaches to teaching a result of findings.

Mean ACT composite scores for first-time entering freshmen over the last five years (including fall 2021 for comparison) appear below. Lowest mean ACT was for fall 2020, indicating a possible artifact of the COVID-19 pandemic, and these are presented in Table 1.

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

<table>
<thead>
<tr>
<th>Semester</th>
<th>English ACT</th>
<th>Mathematics ACT</th>
<th>Reading ACT</th>
<th>Science ACT</th>
<th>Composite ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2017</td>
<td>20.9</td>
<td>20.1</td>
<td>23.0</td>
<td>21.2</td>
<td>21.0</td>
</tr>
<tr>
<td>N=652</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2018</td>
<td>18.5</td>
<td>18.5</td>
<td>21.1</td>
<td>19.7</td>
<td>20.0</td>
</tr>
<tr>
<td>N=503</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2019</td>
<td>19.0</td>
<td>18.5</td>
<td>21.1</td>
<td>20.3</td>
<td>19.6</td>
</tr>
<tr>
<td>N=652</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2020</td>
<td>19.1</td>
<td>18.8</td>
<td>20.9</td>
<td>20.4</td>
<td>19.4</td>
</tr>
<tr>
<td>N=503</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2021</td>
<td>20.1</td>
<td>19.2</td>
<td>22.5</td>
<td>21.2</td>
<td>20.1</td>
</tr>
<tr>
<td>N=490</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Source:** RSU Fall 2021 Fact Book

There was a total of 402 academically deficient enrollments in fall 2020 and spring 2021 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.
The new Accuplacer Next Generation test was used for secondary testing, and it placed significantly more students directly into college-level courses without remediation than did the former Accuplacer instrument.

As described above, RSU has determined that a test optional placement process may provide better access and support student success beginning with fall 2021. Due to this new placement process, fall 2021 developmental and co-requisite sections have decreased from fall 2020 by 24.1%, and developmental student enrollments have decreased by 32.2% over the same period. In the Annual Report of 2021-2022 Student Assessment, RSU will report student success rates with this new model.

### Table 2. 2020-2021 Enrollment in Developmental Coursework

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course Number</th>
<th># Sections</th>
<th># Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition I Supplement</td>
<td>ENGL 0111</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Developmental Reading I</td>
<td>READ 0114</td>
<td>6</td>
<td>77</td>
</tr>
<tr>
<td>College Math Foundations</td>
<td>MATH 0312</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>College Algebra Foundations</td>
<td>MATH 0412</td>
<td>13</td>
<td>157</td>
</tr>
<tr>
<td>Elementary Algebra Plus</td>
<td>MATH 0114</td>
<td>7</td>
<td>97</td>
</tr>
<tr>
<td>Science Proficiency</td>
<td>BIOL 0123</td>
<td>3</td>
<td>25</td>
</tr>
</tbody>
</table>

| 6 courses                      | 41 sections   | 402 students |

During fall 2020, RSU’s Office for Accountability and Academics conducted an analysis of student success based upon placement criteria, defining placement in bachelor’s or associate degree majors. Using RSU student GPA as the dependent variable measuring student success, it was determined that five independent variables provided the best predictability. These variables include:

- ACT composite test score
- High school GPA
- High school success index (high school of origin)
- Admissions ranking
- High school class rank percent

$R^2 = .578$ resulted for bachelor’s degree majors and $R^2 = .474$ for associate degree majors. This analysis is being extended to disaggregate by developmental course work for placement decisions in the coming year.
Developmental and Co-requisite Math Outcomes
With regard to 2020-2021 developmental math student success, 13.3% of RSU’s FTE students were referred to a traditional developmental math course. Among these, 85.7% enrolled in one or more developmental math courses during the same year. A total of 60.0% of the developmental math students passed their course. More than half (52.8%) of these enrolled in a college-level math course the same year to include:

- MATH 1503: Mathematics for Critical Thinking
- MATH 1513: College Algebra
- MATH 1413: Introduction to Statistics

Of the developmental math students who enrolled in a college-level math course last year, 57.9% completed it successfully. A review of the data identified a high drop rate in MATH 1503. This issue has since been addressed, and it is anticipated that the pass rate will be significantly higher in fall 2021 and spring 2021.

For students who were referred to a co-requisite mathematics course in 2020-2021, 21.4% enrolled in one or more co-requisite math courses for a total of 34.7% of first-time freshmen requiring mathematics remediation. A total of 44.2% of math co-requisite students passed their credit level math course while enrolled in their co-requisite math supplemental course/lab. It is important to note that three times more students passed their college-level math course if they were enrolled in a co-requisite course than in a traditional developmental math course.

Co-requisite English
In 2020-2021, 7.6% of FTE students were referred to a co-requisite English course, and 67.5% of these enrolled in a co-requisite college credit level English class. A total of 25.9% passed their credit level English course while enrolled in the co-requisite supplemental course/lab. RSU did not offer non-co-requisite developmental English classes during that academic year. All nine co-requisite English sections were supplemental to Composition I.