How One University Developed an Evidence-Based Placement Practice That’s Informing Graduation Rates

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HOUSEKEEPING

- Use the Q&A area to submit questions as they arise.
- This webinar will be archived at NROC.org, and you’ll receive a follow-up email with a link to the recording and slides.
- Do you need help with Zoom? Email community@NROC.org.
Network of institutions

Adaptive learning development

OER creation and distribution

Iteration & scaling

2003

2023

EdReady®

Powered by NROC

THE NROC PROJECT

CELEBRATING 20 YEARS

Hippo Campus

MATH
ALGEBRA 1
DEVELOPMENTAL MATH

ENGLISH
INTEGRATED READING AND WRITING
EdReady is an adaptive learning platform that’s been adopted by districts, systems, and states to personalize math and English instruction and to empower data-driven, student-success decisions.

Meet students where they are... & prepare them for what’s next.
EDREADY SUPPORTS:

- Just-in-time learning and accelerated learning
- Grade-to-grade transitions
- Dual enrollment / early college / P-TECH programs
- High school completion
- College and career readiness
- Low-stakes, formative assessment for placement
- Co-requisite education
- HSE / GED, CASAS, TABE, or NRS preparation
- Teacher preparation
Mastery Status of Learning Objectives (Unit and Topic Level)

- **Untested**: this material was not covered by the diagnostic
- **Not Ready**: student has mastered less than 50% of included learning objectives
- **Needs Review**: student has mastered 50-99% of included learning objectives
- **Doing Well**: student has mastered 100% of tested learning objectives... but not everything has been tested yet
- **Mastered**: student has mastered 100% of included learning objectives
**TABE 9-10 Math - Easy-Medium**

- **Show Details**: On
- **Use Shapes**: Off

### Units you should study:

Note: You have not been tested on every topic in the unit(s) below. Click on any unit at any time to check your mastery more fully.

<table>
<thead>
<tr>
<th>Units</th>
<th>Topic Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Numbers</td>
<td></td>
</tr>
<tr>
<td>Fractions and Mixed Numbers</td>
<td></td>
</tr>
<tr>
<td>Decimals</td>
<td></td>
</tr>
<tr>
<td>Measurement</td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td></td>
</tr>
<tr>
<td>Concepts in Statistics</td>
<td></td>
</tr>
<tr>
<td>Real Numbers</td>
<td></td>
</tr>
</tbody>
</table>

**Updated**: 07/21/2020 20:11
$12.75 • 33.5 hrs.
Sample Student Population

- More prepared
- Less prepared

identifying population for intervention

academic performance
What We Expect: Without Intervention

- More prepared
- Higher grades, higher retention
- Less prepared
- Lower grades, lower retention

No intervention before and after.
What We Hope: With Intervention

Before

No intervention

After

Intervention

more prepared

less prepared

higher grades
higher retention

improved grades
improved retention

academic performance
Ideal Outcome: With Intervention

- More prepared
- Less prepared

No intervention

Intervention

Equal grades equal retention

Academic performance

Before

After
EdReady puts educators in control.
Goals

You define what you want your students to be ready for.
Scopes

You tailor the study paths and diagnostic assessments your students use.
Resources

You choose which vetted and award-winning multimedia learning resources students can access.
Readiness

You develop the messages that students see when they reach or eclipse their target score.

What’s next for your students?
Data Access

You set EdReady administrative users’ permissions, including who has access to which student data.
EdReady as Graduation Indicator

Dr. Falynn Turley- Associate Professor of Finance, Economics, and Accounting
Dr. Jan Case- Dept. Head, MCIS
Courtney Peppers- Director, Learning Services and Analytics
Gina Glass- Coordinator, Summer Bridge and Placement
Placement with EdReady Math

Where do students take it?

Placement Site: Math Placement
Communication Plan

EdReady Communication

1. Student Registers for Gamecock Orientation
   Once a student registers for GO!, they will start getting reminders about completing EdReady placement exams.

2. Two Weeks Later - Starting March 1
   Text, student email, & parent email introducing EdReady. Content specific to student progress. Text from Admissions, emails from edready@jusu.edu.
   - Starting in May, we will reduce from 2 weeks to 7 days.

3. + 30 Days Later
   Reminder to complete EdReady exams specific to student progress. Email from edready@jusu.edu.
   - Starting in May, we will reduce from 30 days to 10 days

4. GO! 14 Day Out Reminder
   The GO! Team will send a reminder email to students and parents 14 days before their GO! session (Admissions will send a text to check email).
   - This will include a message from Dr. Bavonee about importance of EdReady completing before GO!

Bonus: GO! Checklist
The Admissions & GO! team will point students to their GO! checklist throughout the summer. This reminds students to complete EdReady exams at least 10 days before orientation.
Completion Rates 2016-2023
EdReady Math Placement History

• 2015-Pilot, students were given the option to use EdReady (about ½ opted in)

• 2016-Required for all students with no transfer, DE, AP, CLEP credit

• Over 9,000 students have completed the initial assessment since 2016

• EdReady scores correlated with outcomes in MS 112 Precalculus Algebra

• Science Research Initiative Study 2018
PANDEMIC IMPACT ON SUPPORT STRATEGIES

• It was challenging to anticipate the effects of removing ACT scores from the admissions process. Cumulative GPA only required.
• Initial years of pandemic, decrease in EdReady Math Placement completion
  • Completion has rebounded since 2022
• The number of sections of developmental math increased from around 7 sections in 2019 to 21 sections in fall 2022 and fall 2023 with increased max capacity from 20 to 30 students.
• Record enrollment for three years (FTF primarily in 20-22).
• Higher density of students who need additional support and additional remediation (arithmetic and pre-algebra).
• Faculty Burnout
JSU was able to reduce the number of sections of developmental math that are offered by about 80%.

The reduced number of developmental courses did not result in a loss of credit hour production because more students take credit-bearing math.

Students who completed their placement study path saved time by enrolling in credit-bearing math in their first semester.

Students unable to complete their study path took (and paid for) a developmental math course. If still unable to complete the review, they receive tutoring in a no cost / no credit Emporium until they reach mastery. Overall, they saved money from our previous system.

Our greatest challenge is that the weakest students have the lowest attendance, and we have not been able to find an incentive that is strong enough to overcome their avoidance.
<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Session Time</td>
<td>~56.4 Minutes</td>
<td>Total Hours / Total Logins</td>
</tr>
<tr>
<td>Average Login Count</td>
<td>~13.3 Logins</td>
<td>Average of Login Count</td>
</tr>
<tr>
<td>Average Hours Using EdReady</td>
<td>~10.6 Hours</td>
<td>Average of Hours</td>
</tr>
<tr>
<td>Average Most Recent Score</td>
<td>~68.7 (Out of 100)</td>
<td>Average of Most Recent Score</td>
</tr>
<tr>
<td>Average Score Gain</td>
<td>~14.5 (Out of 100)</td>
<td>Average of Score Gain</td>
</tr>
<tr>
<td>Average Diagnostic Score</td>
<td>~54.3 (Out of 100)</td>
<td>Average of Diagnostic Score</td>
</tr>
</tbody>
</table>
Hours Using EdReady vs. Average Score Gain (n = 4321)
## EdReady Mean Score for Grade Category

### MS 112

<table>
<thead>
<tr>
<th>Final Grade</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>953</td>
<td>84.411</td>
<td>12.158</td>
<td>(83.401, 85.422)</td>
</tr>
<tr>
<td>B</td>
<td>708</td>
<td>81.414</td>
<td>14.385</td>
<td>(80.241, 82.586)</td>
</tr>
<tr>
<td>C</td>
<td>641</td>
<td>78.495</td>
<td>16.262</td>
<td>(77.262, 79.727)</td>
</tr>
<tr>
<td>D</td>
<td>412</td>
<td>78.209</td>
<td>17.274</td>
<td>(76.672, 79.746)</td>
</tr>
<tr>
<td>F</td>
<td>715</td>
<td>77.366</td>
<td>17.673</td>
<td>(76.200, 78.533)</td>
</tr>
<tr>
<td>I</td>
<td>9</td>
<td>85.56</td>
<td>7.23</td>
<td>(75.16, 95.96)</td>
</tr>
<tr>
<td>W</td>
<td>756</td>
<td>76.513</td>
<td>18.488</td>
<td>(75.378, 77.648)</td>
</tr>
</tbody>
</table>

Pooled StDev = 15.9142
EdReady is used as a low stakes placement tool at JSU. A “score” is defined as the highest score attained by the students in their independent review.

“Retention” at JSU is defined in this study as first-time, full-time freshmen who return to JSU for their sophomore year.

Data was collected in 2015 - 2020 by JSU’s Office of Institutional Research & Effectiveness.

The purpose of the analysis was to identify indicators that are useful in determining the characteristics of students who are most likely to be retained.
What are Indicators?

Indicators are traits that are significantly correlated with a variable of interest, such as retention. Indicators are useful in creating profiles of students who have the greatest need of intervention in order to experience success.

These indicators are used as potential factors that can impact an outcome (retention, graduation, etc). The impact of individual factors can be positive or negative.

Previous work (Fall 2020) was done that indicated retained students have a higher average score \((M = 77.5, \text{SD} = 17.4)\) on EdReady Math than those who were not retained \((M = 70.1, \text{SD} = 19.9)\).
EXAMPLES OF FACTORS THAT ARE ASSOCIATED WITH RETENTION AT JSU

- Having an A or B average in High School
- Being Female
- Receiving a Scholarship
- Being a University Athlete
- Having AP Credit
- Participating in Work Study
- Participating in Distance Learning (some years)

*Common Indicators that a student is more likely to be retained*
EXAMPLES OF FACTORS THAT ARE ASSOCIATED WITH RETENTION AT JSU

- Being a first-time freshman aged 20 or older
- Receiving a Pell Grant or a Loan
- Being Conditionally Admitted
- Race (some years)

*Common Indicators that a student is less likely to be retained*
EXAMPLES OF FACTORS THAT ARE NOT ASSOCIATED WITH RETENTION AT JSU

Indicators that have not shown an association with retention

BEING A VETERAN

CHOICE OF COLLEGE MAJOR

HIGH SCHOOL STATE
Graduation Rates at JSU (2011-2019)

*From JSU Factbook*
Graduation Rates at JSU based on EdReady

• 2017 Cohort:

<table>
<thead>
<tr>
<th>Graduation Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Year</td>
<td>316</td>
<td>79.009</td>
<td>13.315</td>
<td>A</td>
</tr>
<tr>
<td>5-Year</td>
<td>154</td>
<td>73.58</td>
<td>19.22</td>
<td>B</td>
</tr>
<tr>
<td>6-Year</td>
<td>55</td>
<td>67.64</td>
<td>16.83</td>
<td>B,C</td>
</tr>
<tr>
<td>Yet to Graduate</td>
<td>478</td>
<td>67.494</td>
<td>20.311</td>
<td>C</td>
</tr>
</tbody>
</table>

Students who graduate in 4 years earned a higher average EdReady Math score than those who graduated in 5 years, in 6 years, and those who have yet to graduate (*F = 27.37, ndf = 2, ddf = 999, p < 0.001*).

*Grouping from post-hoc comparison
### Graduation Rates at JSU based on EdReady

**2018 Cohort:**

<table>
<thead>
<tr>
<th>Graduation Type</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 year</td>
<td>333</td>
<td>78.44</td>
<td>14.5</td>
<td>A</td>
</tr>
<tr>
<td>Five Year</td>
<td>144</td>
<td>70.00</td>
<td>17.8</td>
<td>B</td>
</tr>
<tr>
<td>Did Not Graduate</td>
<td>461</td>
<td>66.93</td>
<td>19.7</td>
<td>B</td>
</tr>
</tbody>
</table>

Students who graduate in 4 years earned a higher average EdReady Math score than those who graduated in 5 years and those who are yet to graduate (F = 41.41, ndf = 2, ddf = 935, p < 0.001).

*Grouping from post-hoc comparison*
2019 Cohort:

<table>
<thead>
<tr>
<th>Graduation Type</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 year</td>
<td>362</td>
<td>82.4</td>
<td>13.4</td>
</tr>
<tr>
<td>Did Not Graduate</td>
<td>900</td>
<td>73.1</td>
<td>18.4</td>
</tr>
</tbody>
</table>

Students who graduate in 4 years earned a higher average EdReady Math score than those who have yet to graduate ($t = 9.88$, df = 906, $p < 0.001$).
Questions?

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Gina Glass gglass@jsu.edu

Dr. Jan Case jcase@jsu.edu
Look for JAX State and The NROC Project at the NOSS Conference next year!

The title of our presentation there will be:

“Raising the Stakes with a Low Stakes Placement”

48th Annual Conference

February 14-17, 2024
Westgate Resort and Casino
Las Vegas, NV
Thanks for joining us today!

GET IN TOUCH

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partnership@NROC.org

Prepare your students for what’s next.