

# CASE STUDY: REVAMPING COLLEGE MATH PLACEMENT AT NEVADA STATE COLLEGE

Under Nevada State College's old math placement policy, incoming students took the Accuplacer exam during the summer prior to new-student orientation. Historically, about 75% of those students placed into remedial math based on their Accuplacer scores or on their scores from a previous SAT or ACT test. In 2016, they moved to using EdReady as both an initial placement diagnostic (when an SAT or ACT score was not available) and as an independent-study remediation option for students to use before they arrived on campus. This gave students the ability to increase their EdReady scores and thus their math course placement, enabling many of them to avoid taking a remedial math course.

#### INSTITUTIONAL PROFILE

Nevada State College is a four-year public college near Las Vegas, Nevada, with enrollment of about 3,500 students. Identified nationally as a Minority Serving Institution, more than 60% of the enrollees are firstgeneration college students.

#### **IMPLEMENTATION**

"[In June of 2016], we are changing our approach," said Serge Ballif, assistant professor of mathematics at Nevada State College. "The goal is to remove all of the bottlenecks and give students at least one successful math experience in their lives."

In prior years, when student placement was largely based on a single score from the Accuplacer exam, students were given no opportunity to improve their standing. Even then, "the Accuplacer placement test has proved to be a poor predictor of success [in their subsequent math courses]," notes Ballif.

With the new EdReady placement policy, incoming students who don't have an ACT or SAT score take an EdReady diagnostic to get their initial placement. (All high school juniors in Nevada are now required to take the ACT, so going forward, more students will have a default initial placement than in previous semesters.) Any students who wish to improve their placement have the option to continue working independently through EdReady to increase their scores. Students who worked through EdReady were able to learn approximately the same math that they would have covered in NSC's remedial math course, Math 95M.



# NEVADA STATE

#### **DETAILS**

**WHO WAS SERVED:** Incoming college freshmen

**NUMBER OF STUDENTS: 247** 

**IMPLEMENTATION:** Independent study in the summer prior to freshman year

**RESULTS:** Placement of new students into college-level math courses increased from 24% to 42%

INSTRUCTIONAL APPLICATION:
College Math Readiness/Placement

By taking advantage of the EdReady option, students could save \$800 and bypass a full-semester, five-credit remedial course (Math 95M) that wouldn't count towards college credit. "Students who ignore EdReady will just keep their initial placement," notes Ballif, "so there is no disadvantage to students who choose not to use EdReady."

The first year of breaking away from the Accuplacer-to-Developmental Math cycle can be difficult, notes Ballif. "Perhaps the biggest challenge that we faced in starting this new program was just getting the word out to students. The whole program was destined to fail if we only provided a simple link in an email. To get students started, we approached from several angles."

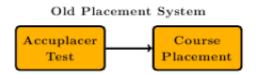


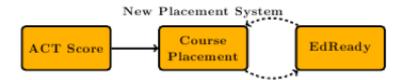
"Needless to say, we, and our students, are thrilled."

—Dr. Serge Ballif, Assistant Professor of Mathematics, Nevada State College



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Under the old system, students took the Accuplacer and were placed into a math course; more often than not, that course was remedial math. With the new placement system, students are placed by their ACT scores, but if they wish to avoid remediation and improve their scores, they can work independently in EdReady to reach the target score needed to meet their goal before arriving on campus.

Each incoming student who placed below college-level math received an email from the Academic Advising Center telling them about the free opportunity to use EdReady to improve their placement. A week later, a student worker called each of the students to talk in person about their options and to answer their questions.

NSC staff also placed a special EdReady link in the resource tab of Canvas, the learning management system used by students at the school. Their custom EdReady landing page (https://nsc.edready.org) features a video and an easy-to-follow flow chart of the placement process, and the motivating text, "Improve your placement and save \$800."

Finally, at new-student orientation, the math advisor reviewed with students all of the details of how to use EdReady to improve their placement. Following orientation, they sent out another email to students and had the peer advisors follow up by phone with students who hadn't logged into EdReady to improve their scores after taking the initial diagnostic.

#### **RESULTS**

For Fall 2016, NSC had 247 of its 325 first-year students place into remedial math for fall semester based on their Accuplacer, SAT, or ACT scores. They contacted these students about EdReady through the various channels described above. At the end of summer semester, 60 of the 247 students had improved their placement into a college-level course. Overall placement of new students into college-level math therefore improved from 24% (the 78 students who placed into college-level math through their ACT or SAT scores) to 42% (the 78 students plus the now-prepared 60 who had used EdReady, so 138 of the 325 first-year students). The students spent 23.7 hours on average over the summer using EdReady to improve

their placement. The vast majority of students who used EdReady to place into a college-level math course arrived on campus one semester away from completing all of their college math requirements. "Needless to say, we, and our students, are thrilled," says Ballif.

When asked whether EdReady could really provide all the learning that a full semester-long developmental course would, Ballif notes, "For diligent students, the answer is probably 'yes.' If you show me a student who takes the initiative to spend 20 to 30 hours over the summer studying math on their own, working through problems, consistently bringing up their score, then I'll show you a student who will thrive in a college-level math course."

### WHAT'S NEXT?

Ballif is now working with NSC's Office of Institutional Research to track the first cohort of EdReady-placed students and answer questions such as:

- How many students who used EdReady and became eligible for college math courses actually registered for those courses?
- What were those students' grades in their first college math course, as compared to historical data for those classes, as well as for students in the who were placed by their ACT or SAT scores?
- What are the number of drops and incompletes for students in this EdReady-using cohort, as compared to historical data for those classes as well as for students who were placed by their ACT or SAT scores?

While they wait for the data to come in, they will continue to use EdReady for remediation and placement of new students arriving on campus.