# The Impact of the New Math Placement Process on Student Success

Prepared by Giovanni Sosa

CRAFTON HILLS

# **Purpose of Brief**

To examine the potential effects of the new AB 705 compliant placement process in math.

Institutional Effectiveness,

Research & Planning

## **Summary of Findings**

- Relative to the former placement process (5%), firsttime CHC students placed via the new math placement process were significantly more likely to place into transfer-level math (71%).
- In comparison to the former placement process, 30% of first-time CHC students placed via the new math placement process were significantly more likely to successfully complete transfer-level math within their first year compared to only 14% of first-time CHC students with former placement process.
- The number of students completing transfer level math increased from 64 in 2017-2018 with the former process to 246 in 2018-2019 with the new placement process, a 384% increase.

#### **Overview**

CHC faculty and staff have worked tirelessly to implement a new placement process designed to increase the likelihood that students successfully complete transfer-level coursework in math and English in one year – a process that is both consistent with AB 705 legislation and conducive to helping students achieve their educational goals. The math department was the first to deploy a new placement process in April 2018, and English followed suit in February 2019. Given that the new math placement process has been in effect for an entire academic year, we examined its effect on helping students complete transfer-level math in one year. The findings indicated that the new math placement process has resulted in a significant increase in both the number and percentage of students completing transfer-level math within their first year at CHC.

## <u>Methodology</u>

Two cohorts of students were compared, both of which consisted of high school students attending CHC for the first time. One cohort consisted of those attending CHC for the first time in either Summer 2017 or Fall 2017 and receiving a placement via our former math placement process. The second cohort consisted of those attending CHC for the first time in either Summer 2018 or Fall 2018 and receiving a placement via our new math placement process. Since the new placement process was deployed on April 2<sup>nd</sup>, 2018, we compared the 2018 cohort of students receiving a math placement between 4/2/2018 and 8/13/2018 (first day of class in Fall 2018) to the 2017 cohort of students receiving a math placement between the same period in 2017 – specifically, between 4/3/2017 and 8/14/2017 (first day of class in Fall 2017).

## **Findings**

Figure 1 illustrates the percentage of students in each cohort placing into transfer-level math. Of the 459 students in the 2017 cohort receiving a math placement, 5% received a placement of transfer-level math. On the other hand, among the 821 students in the 2018 cohort receiving a placement, 71% received a placement in transfer-level math.

Figure 2 shows the number of students in each cohort successfully completing transfer-level math within one year. Among the 459 students in the 2017 cohort, 64 (13.9%) successfully completed a transfer-level math course in 2017-

18 (i.e., Summer 2017, Fall 2017, or Spring 2018). However, among the 821 students in the 2018 cohort, 246 (29.9%) successfully completed a transfer-level math course in 2018-19 (i.e., Summer 2018, Fall 2018, or Spring 2019). Therefore, first-time students in 2018 were more than two times more likely to complete transfer-level math than were first-time students in 2017.

# **Implications**

These findings suggest that our new math placement process, one directly tied students' high school performance, leads to an increase in the number and percentage of students being placed into transfer-level math and more than doubles their likelihood of successfully completing transfer-level math within their first year. These findings suggest strongly that our new math placement process is helping students achieve a key academic milestone in their first year, and in doing so, increasing the probability that they remain enrolled at CHC and subsequently earn an award and/or transfer. This has clear implications for student success, the regional economy (more successful students may be able to secure higher paying jobs), enrollment management (students making progress will continue to enroll in classes), and the Student Centered Funding Formula (potential increases to the college's base and student success allocations).



**Figure 1**. Among the 459 students in the 2017 cohort receiving a math placement via our former process, 24 of them (5.2%) received a transfer-level math placement. In contrast, among the 821 students in the 2018 receiving a math placement via our new process, 584 (71.1%) received a transfer-level placement.



**Figure 2**. Among the 459 students in the 2017 cohort receiving a math placement via our former process, 64 (13.9%) successfully completed transfer-level math in their first year. In contrast, of the 821 students in the 2018 receiving a math placement via our new process, 246 (29.9%) successfully completed transfer-level math in their first year.