

Office of Institutional Research and Assessment

2015 CIRP Freshman Survey: Need for Academic Support

In summer 2015, Keene State College asked incoming first-year students to complete the CIRP Freshman Survey during Orientation. Usable responses were received from 882 first-time, full-time first-year students (95% response rate). Results from this survey will be shared in a series of reports on clusters of related survey items. This report summarizes the CIRP responses that relate to need for academic support. National comparison data are not yet available for 2015, so 2014 national comparison data are reported here.

KEY FINDINGS

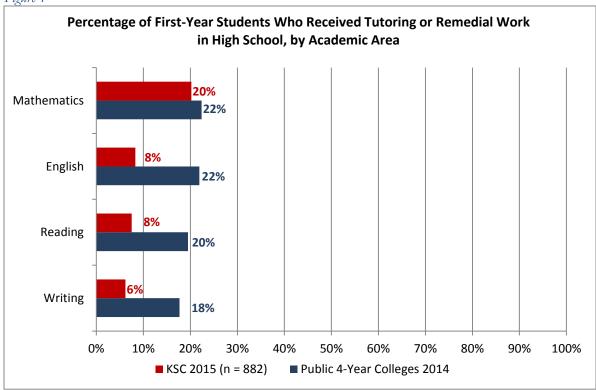
- Substantial differences between the current findings and those reported in 2013 were found for both student reports of experience with remediation in high school and their expected need for academic support in college.
 - Academic support in high school. In 2013, KSC first year students were much more likely than national peers to have received remediation in each topic area. In 2015, KSC first-year students were less likely than their national peers to have had academic assistance in high school. This difference was greatest for English (KSC-8%; peers-22%), reading (KSC-8%; peers-20%), and writing (KSC-6%; peers-18%).
 - o Need for academic support in college. In 2013, 29% of both KSC first-year students and the national sample expected to need college-level math tutoring. This year, 40% of KSC students expect to need support in math compared to 23% of their public 4-year institution peers. In addition, KSC students in 2013 were less likely to anticipate needing English or writing remediation than their national peers, but this year they were more likely than their peers to anticipate these needs
- One-fifth of KSC students (20%) reported that they received tutoring or remedial work in mathematics during high school. Less than half as many received remedial English (8%), reading (8%), and writing services (6%). In contrast, approximately 20% of students in the national sample received remediation in all four academic areas.
- Mathematics was the subject area in which the greatest number of KSC students expect to need academic support in college. Nearly twice as many KSC first-year students reported this need (40%) than did their national peers (23%). Moreover, the need for math support was anticipated by nearly three times more KSC students than those expecting to need support in English (12%), writing (16%), or reading (6%). This may in part be due to a 10% increase between 2013 and 2015 in the number of students planning on majoring in areas that emphasize quantitative skills.

DETAILED FINDINGS

Academic Support Received in High School

The CIRP instrument asked students to indicate if they "have had ... any special tutoring or remedial work" in English, reading, mathematics, or writing. Figure 1 compares the percentage of KSC students who received academic assistance in mathematics, English, reading, and writing during high school, with the most recently available comparison data from students at public four-year institutions in 2014. For every subject, KSC students were less likely than their national peers to have received academic assistance in high school. This difference was greatest for English, Reading and Writing. KSC students were approximately one third as likely as those in the national sample to receive remediation in these areas.





The pattern of comparisons with national findings reported above is the opposite of the CIRP findings reported in 2013. At that time, KSC first-year students were nearly twice as likely to have had high school remedial coursework in each of these four areas as were students in the nation's public 4-year colleges. Since 2013, self-reported use of high school tutoring and remedial support has decreased among KSC students and increased among their peers nationally.

As a means of understanding the 2013-2015 reversal of KSC and national peer group's use of remediation in high school, current findings were compared with those reported during each of the years the CIRP was administered at KSC. Because the trend graphs generated for English, writing, and reading were almost identical, only the math and English graphs are presented below (Figures 2 and 3).

Figure 2

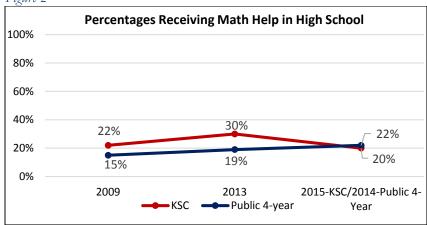
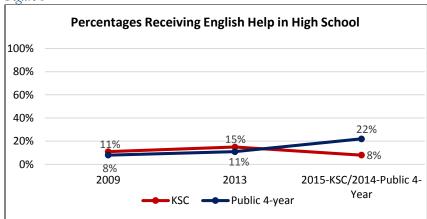


Figure 3



Two distinct patterns are evident from the trend graphs: one for math and one for language-based remediation (English, writing, and reading). For math, the number of students receiving remediation nationally has gradually increased from 15% in 2009 to 22% in 2014. This may reflect national and state priorities to increase participation in science, technology, engineering, and math curricula. For KSC students, however, a substantial increase in reports of past math tutoring occurred in 2013 that was later reversed in 2015. Currently, the number of KSC students who received math remediation in high school (20%) is only slightly lower than the amount who did so in 2009 (22%). Thus, the 30% rate reported in 2013 may be a statistical anomaly.

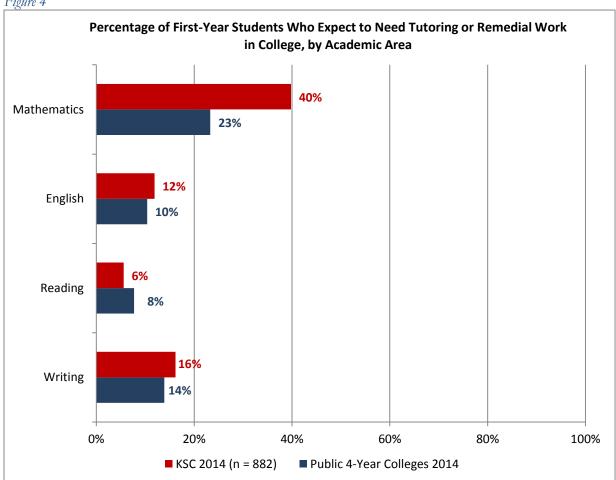
For the language-based remediation areas, an entirely different pattern is evident. Almost twice as many public 4-year students received English, writing, or reading remediation in 2015 as in 2013, but among KSC students, half as many received this type of remediation this year as in 2013. One possible explanation of the spike in national remediation rates may be recent increases in English Language Learners (ELLs) in the nation's public schools. According to *American Freshman*, the percentage of public 4-year institution first-year students who

reported that English is not their first language rose from 8% in 2009 to 15% in 2015. These students are much more likely to need language-oriented remediation in high school than native English speakers. Moreover, school districts with budget constraints may be prioritizing ELL students for such classes.

Academic Support Needed in College

Students were also asked if they feel they need tutoring or remedial work during college in the same subjects. As summarized in Figure 4, nearly twice as many KSC students reported that they expect to need mathematics tutoring (40%) than those in the national sample (23%). KSC students were slightly more likely to expect to need English and writing tutoring than their national peers, but slightly less likely than their national peers to report needing reading remediation. For both samples, almost twice as many students reported a need for math remediation in college than those anticipating remediation in each of the other subjects.





The most striking difference between the anticipated support need findings obtained in 2013 and 2015 was in the need for math remediation. In 2013, 29% of both KSC's first-year students and the national sample of public 4-year college students expected to require math remediation. In 2015, 40% of KSC anticipated this need, but only 25% of their national peers did so. Possible explanations of the KSC change in math remediation need include decreases in math aptitude of incoming students, and increasing perceptions of quantitative needs among this group. The first possibility can be rejected on the basis of incoming SATM scores, which increased from an average of 494 in 2013 to 524 in 2015. Support for the second explanation, however, is provided by student major data. The percentage of students reporting a quantitative-oriented major (biology, business, engineering, health sciences, math/computer science, and physical science) increased from 30% in 2013 to 33% in 2015.

It is clear that math is the area of greatest concern for first-year KSC students. Identifying and implementing effective means of addressing this concern may contribute to KSC student retention and completion rates.