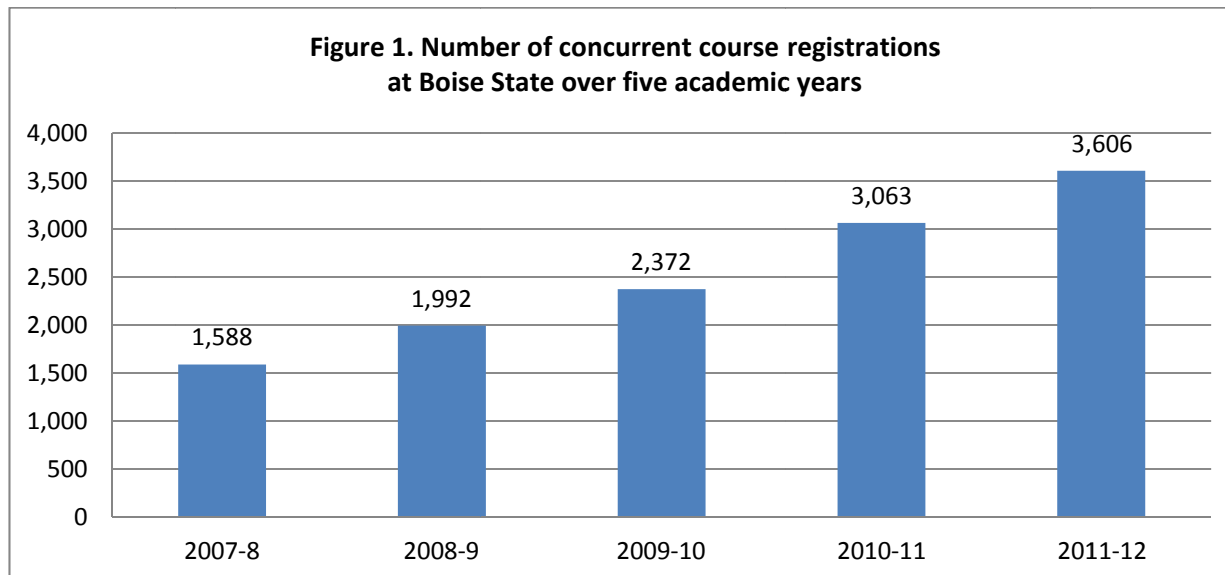


Institutional Analysis, Assessment & Reporting

Do Students Who Take Concurrent Enrollment Courses from Boise State While in High School Have Higher College Attendance Rates and Perform More Successfully in College?

Prepared by *Marcia Belcheir*
Associate Director
March 2012

Taking college courses while in high school that are delivered on-site at the student's high school using high school instructors has been promoted as a way to encourage college attendance and lessen the time to college graduation by enabling students to begin their college careers with credits in hand. Known as "concurrent enrollment" at Boise State and "dual enrollment" by the State Board of Education, this approach to college attendance has become increasingly popular. As shown by Figure 1 below, over the past five years, the number of registrations in concurrent courses has more than doubled for students taking courses through Boise State University.



The purpose of this study was to address the following questions:

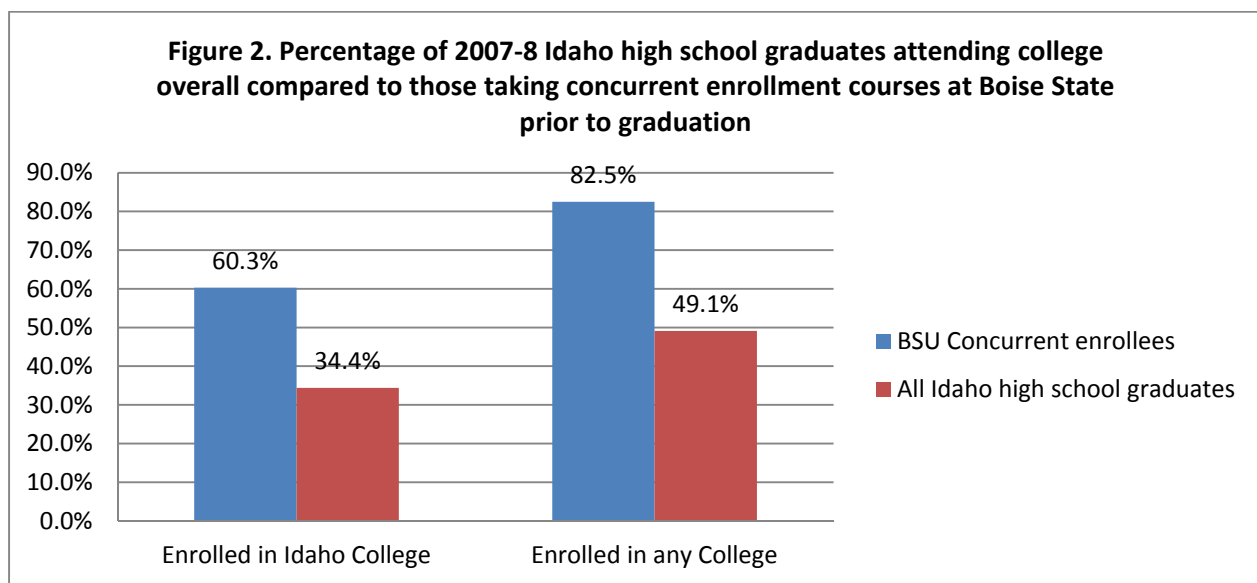
- Do Boise State concurrently enrolled students have a higher college-going rate compared to Idaho high school graduates overall?
- Do former concurrently enrolled students who then attend Boise State as bachelor's degree-seeking students have higher first semester GPAs compared to other new freshmen?
- Are former concurrently enrolled students who then attend Boise State as bachelor's degree-seeking students more likely to be retained compared to other new freshmen?
- Are former concurrently enrolled students who then attend Boise State as bachelor's degree-seeking students more likely to graduate in four years compared to other new freshmen?

Overall, positive outcomes were associated with concurrent enrollment. Concurrent students were more likely to attend college and once there, were more likely to have higher GPAs their first semester, to be

retained at higher rates, and to have a higher percentage of graduates at the four-year mark. It is unclear the extent to what degree concurrent enrollment was the direct cause of these results given the factors that lead students to become concurrent enrollees in the first place also likely play a role in a successful college-going experience.

Do concurrently enrolled students who took courses through Boise State have a higher college-going rate compared to Idaho high school graduates overall?

According to the *Digest of Education Statistics 2010*¹, 49.1% of 2007-08 Idaho high school graduates were enrolled in college in any state in the fall of 2008, and 34.4% were enrolled in college in Idaho. For students obtaining concurrent enrollment credits through Boise State who also graduated high school in 2007-8, 82.5% were enrolled in college in any state, and 60.3% enrolled in college in Idaho.²



A prior study of Boise State concurrent enrollees³ and 2003-4 Idaho high school graduates also found that concurrent enrollees were more likely to attend college compared to Idaho high school graduates overall. Clearly, high school graduates who take college courses while in high school are more likely to attend college compared to graduates overall. There are many potential reasons why concurrent enrollees are more likely to go to college including:

- they may be better students seeking greater academic challenges by taking college courses,
- they may be more serious about attending college as evidenced by an early start on their college career,
- they may have families who are more likely to support them in their goal of a college degree

¹ Data found at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011015>, Chapter 3, Table 211. Information retrieved March 9, 2012

² Note that we only have access to data on students attending Boise State, not all Idaho concurrent enrollees.

³ Belcheir, M. (2008, September). *What happens to concurrently enrolled high school students who attended Boise State University during high school?* Boise State University: Office of Institutional Analysis, Assessment, and Reporting. Report can be retrieved from <http://iassess.boisestate.edu/wp-content/uploads/2011/07/rr200803concurrentenrollmentstudy.pdf>

- high school teachers and counselors may have urged them to enroll in college courses
- concurrent enrollment in college courses may have helped them resolve to attend college and to believe they could succeed in college.

Table 1 below provides additional information on the educational status of high school graduates from the past four years and their college enrollment. Note that given additional time, even more high school graduates enrolled in college, though most enrolled within one year.

Table 1. College-going status of students taking concurrent enrollment courses at Boise State

High school Graduation Year	Enrolled at Boise State within one year	Enrolled at other Idaho college within one year	Enrolled at out-of-state college within one year	Enrolled in college after one year	Not found in college to date	Total
2007-08	27.0%	33.3%	22.2%	7.6%	9.9%	100%
2008-09	23.9%	29.8%	23.8%	5.6%	16.8%	100%
2010-11	24.9%	31.4%	24.7%	3.6%	15.5%	100%

Do former concurrently enrolled students who then attend Boise State as bachelor’s degree-seeking students have higher first semester GPAs compared to other new freshmen?

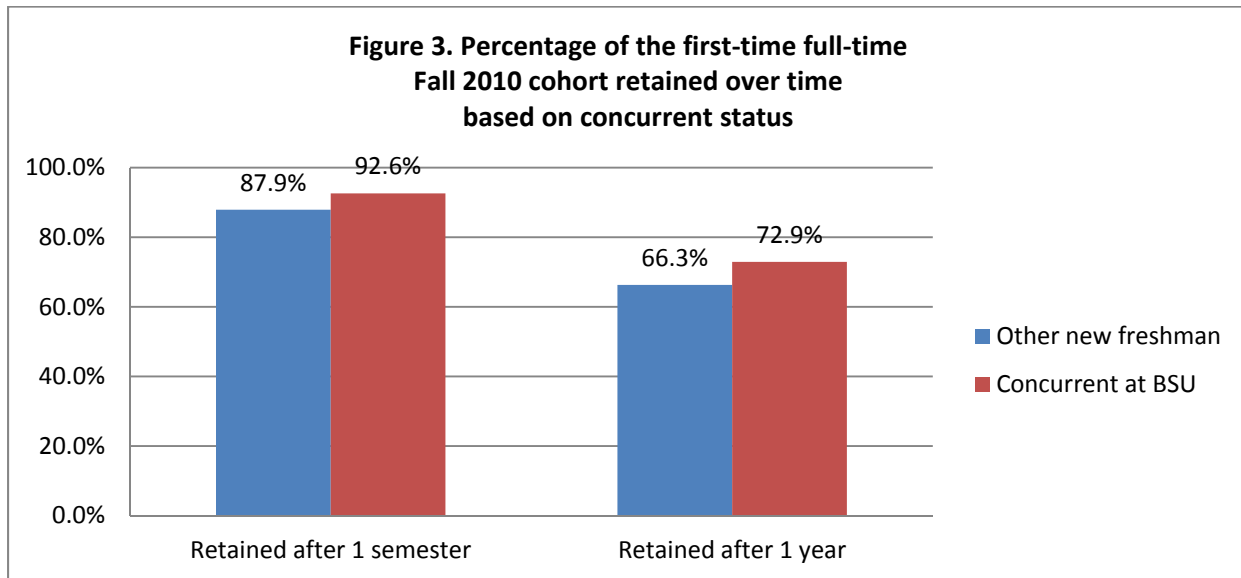
One could hypothesize that students who had already experienced Boise State while in high school would have an advantage over other new freshmen who were new to the college environment. On the other hand, one could also hypothesize that concurrently enrolled students hadn’t *really* experienced college since they were taught by high school teachers in a high school classroom, sometimes with additional time allotted for instruction and thus might even perform worse than other new freshmen. Or those students may be poorly prepared for subsequent courses that they will take once attending college. What is the case?

Using the first-time, full-time fall cohorts for the past five years (2007-2011), former concurrently enrolled students did have somewhat higher first semester GPAs ($F_{1,8263}=16.13, p<.0001$). Students who previously took concurrent enrollment courses had an average first semester GPA of 2.64 compared to a GPA of 2.49 for other first-time-in-college students.

Although taking concurrent college courses in high school may have better prepared these students for college, other possible explanations also exist. For example, perhaps the concurrent group was better prepared academically, regardless of taking college courses prior to arrival.

Are former concurrently enrolled students who then attend Boise State as bachelor’s degree-seeking students more likely to be retained compared to other new freshmen?

Using the Fall 2010 first-time, full-time degree-seeking group of freshmen, it was found that the concurrent group of students was more likely to be retained both after one semester ($\chi^2=6.53$, $df=1$, $N=2,495$, $p=0.01$) and after one year ($\chi^2=5.96$, $df=1$, $N=2,495$, $p=0.01$). See Figure 3 below for details.

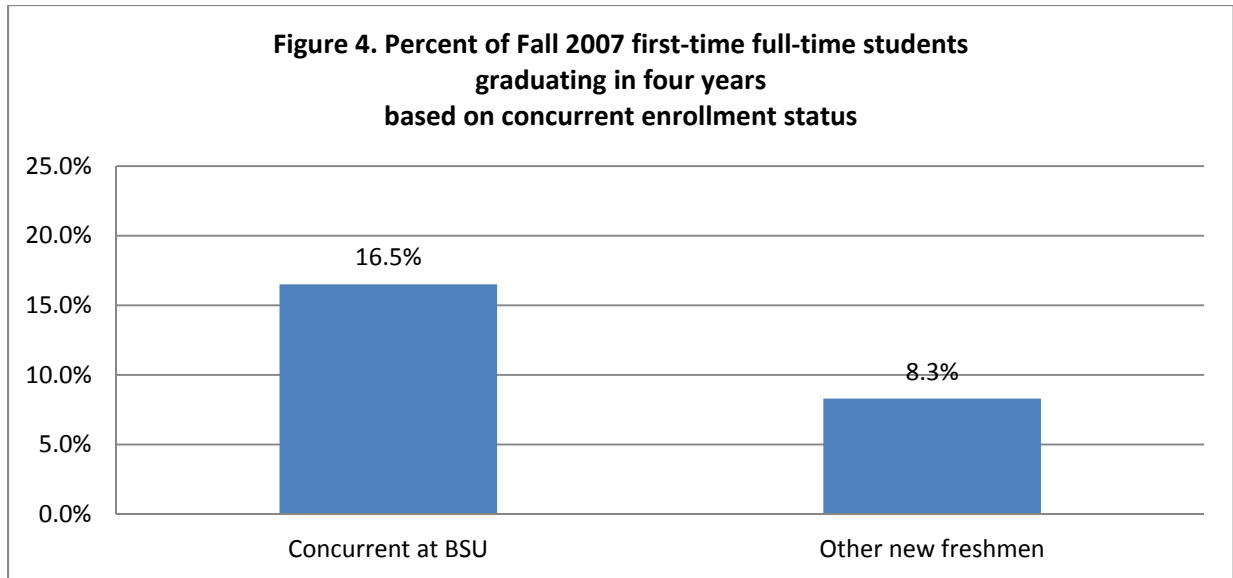


It may be that concurrent enrollment directly facilitated higher retention rates by allowing students to take courses earlier and with more support that other students fail in their freshman year (e.g. math). However, because students cannot be randomly assigned to enroll in concurrent courses or not, it is still uncertain that concurrent enrollment “caused” higher retention or whatever correlated factors may have been the cause, e.g., different academic preparation, greater goal orientation, more family support, different courses.

Are former concurrently enrolled students who then attend Boise State as bachelor’s degree-seeking students more likely to graduate in four years compared to other new freshmen?

Concurrent students are more likely to be retained. Are they also more likely to graduate sooner? Using the Fall 2007 first-time full-time cohort, the most recent cohort group that could have graduated in four years, it appears that more of the concurrent group graduated at the four-year mark compared to other students in the cohort ($\chi^2=10.88$, $df=1$, $N=2,263$, $p=0.001$). In fact, about twice as many of the concurrent group had graduated compared to other members of the cohort (see Figure 4 below).

This finding could be due in part to the fact that concurrent students began college with more credits compared to other new freshmen so it would be expected that they would finish sooner. It could also be due to the fact that concurrent students had higher GPAs their first semester and that they were more likely to be retained, two additional factors related to graduation. And, finally, it could be due to all of the other factors that may have been related to them becoming a concurrent enrollee in the first place.



Summary

The purpose of this study was to see if concurrently enrolled students who took their courses through Boise State were more likely to attend college, to obtain higher grades, be retained at higher levels, and graduate sooner. The answer was “yes” in all cases. For students who graduated in 2007-8 from high school, 82% of students who had taken courses at Boise State were enrolled in college one year later compared to 49% of all Idaho high school graduates. With additional time, 90% of former concurrent students were enrolled in college. Former concurrent enrollees also obtained higher grades their first semester (GPA of 2.64 vs. 2.49) and were more likely to re-enroll after one semester as well as after one year. It was therefore unsurprising to find that the percentage of concurrent enrollees had also graduated after four years was about double that of other freshmen in the cohort.

Offering the opportunity for high school students to gain college credit while in high school was undoubtedly associated greater college success. However, it is impossible to ascertain the extent to which these positive outcomes are related to the concurrent enrollment program itself and the extent to which they are associated with the students who voluntarily enroll in the program. It is fairly certain, however, that both the opportunity offered and the students who chose to participate are factors in the successful outcomes shown in this report.