

College readiness to be engaged

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Abstract

Traditional indicators of college readiness mainly focus on subject-specific high school academic preparation. However, these indicators do not reflect the students' readiness to be meaningfully engaged. The purpose of this study is to broaden the dialog of college readiness to include college readiness for engagement. Results show that with each increasing level of high school academic engagement there is a corresponding increase in the percentage that are engaged at or above the mean level for each of the NSSE engagement scales. This study provides evidence that use of prior high school engagement as a predictor of future academic engagement has merit. There may be good reason to start considering high school academic engagement as an indicator of readiness.

Introduction

Traditional indicators of college readiness mainly focus on subject-specific high school academic preparation (Conley, 2007). For example, student performance on math portions of standardized tests are used as indicator for readiness to participate college-level quantitative study (ACT, 2010), and the number of remedial courses students take after entering college are often used to indicate that many students are not ready for college-level coursework. To be sure, these academic indicators of readiness constitute an important dimension in college readiness. However, these indicators by themselves may not be sufficient. They do not reflect the students' readiness to be meaningfully engaged. We know from years of research that meaningful academic engagement is important predictors of persistence and academic performance in the first year of college (e.g., Reason, Terenzini, & Domingo, 2006). For these reasons, a more comprehensive approach to understand high school students' college readiness needs to take into consideration students' readiness to be meaningfully engaged in academic work. Just as prior academic achievement is an indicator of readiness for academic study in college, prior high school engagement is an indicator of readiness to be engaged in college. Prior research clearly demonstrates the link between high school academic engagement and first-year academic engagement. For instance, Astin and Lee (2003) found that precollege characteristics of hours spent studying in high school, academic ability, leadership ability, and developing a meaningful philosophy of life predicted 61 percent of the variance in time spent studying in college. In addition, prior research has also shown that there is often a consistency of behaviors across time

and situations. Funder and Colvin (1991) investigated the “behavioral consistency” of college students at three different points in time. A total of 62 behaviors were recorded (“high enthusiasm and high energy level”, “is reserved and unexpressive”, “exhibits social skills”, etc). Overall these researchers found that many (but not all) of these 62 behaviors to be moderately to highly consistent across the three points in time and situations.

Thus, prior high school engagement can be considered the foundation for successful student engagement during the first-year of college. This is not to say that academic engagement is perfectly stable across time/situations and that institutions can do nothing to influence engagement, but that just as prior math achievement is a reasonably reliable predictor of future math achievement, so is past engagement behavior a reasonable predictor of future engagement behavior.

The purpose of this study is to broaden the dialog of college readiness to include “college readiness for engagement.”

Method

The data for this study are from three consecutive years (2007 to 2010) of administration of the *Beginning College Survey of Student Engagement* (BCSSE) and the National Survey of Student Engagement (NSSE). BCSSE is administered to incoming first-year students during Orientation, Welcome Week, or other activities prior to the start of the fall classes. NSSE is administered to first-year and senior students during the winter/spring. Thus, first-year students completing BCSSE prior to the start of their fall term are then asked to complete NSSE several months later near the end of their first-year of college. The sample includes more than 45,000 first-year students enrolled at one of 200 institutions across the country who completed both surveys. Of these first-year students, 68% were female. The ethnic/racial characteristics include 5% Asian, 8% African American/Black, 73% Caucasian, 6% Hispanic, and 11% other.

Variables

BCSSE collects data regarding the student’s high school academic background and engagement, their college expectations, and attitudes toward their academic work in the first year of college. Many of the items are used to create one of six scales. Each scale is expressed as a 11-point scale by first recoding each item to a range of 0 to 10 points and then taking the average

score among the group of items. For this study, the high school academic engagement is the BCSSE scale of BCSSE.

High School Academic Engagement (HSAcad) ($\alpha = .76$). This scale consists of ten items that measure student involvement in educationally relevant behaviors during the last year of high school. Items include the amount of work doing reading, writing, and time studying, participating in class discussions, and several collaborative learning activities with peers and faculty.

NSSE collects data regarding the students' academic engagement and participation in effective educational practice. Three scales were created using the NSSE data that reflect different dimensions of academic engagement. They are participation in academically challenging activities (Level of Academic Challenge; LAC); participation in Active & Collaborative Learning (ACL); and participation in Student Faculty Interaction (SFI). Scores for these NSSE scales (aka, "Benchmarks of Effective Educational Practice") ranged from 0 (low) to 100 (high). Internal consistencies for the scales used in this study were .644 (ACL), .714 (LAC), and .719 (SFI) (See Table 1). Additional information regarding psychometric properties and scale descriptions can also be found at: <http://nsse.iub.edu/?cid=154>

Table 1. Descriptive characteristics of BCSSE and NSSE engagement scales.

	M	SD	Skewness	Kurtosis	N _{students}	N _{institutions}	Alpha	Correlation with HSAcad
HSAcad	5.40	1.39	.201	-.042	45251	200	.775	---
LAC	55.08	13.01	-.111	-.037	42367	200	.714	.354
ACL	43.72	16.00	.530	.416	45380	200	.644	.365
SFI	35.50	17.84	.781	.600	42709	200	.719	.339

Analysis

The mean for each NSSE scale was calculated. Next, each level of high school academic engagement was crossed with the mean for each NSSE scale. This created a table indicating the percentage students at each level of high school engagement that scored at the mean level of higher for each NSSE scale (see Table 2).

Results and Discussion

As indicated in Table 2, with each increasing level of high school academic engagement there is a corresponding increase in the percentage of students that are engaged at or above the mean level for each of the NSSE engagement scales. For instance, of the 12% of the entering first-year students that reported a high school engagement of 3, 29.3% had a mean LAC score at or above the mean, 22.6% had an ACL score at or above the mean, and 35.3% had a mean SFI score at or above the mean. In contrast, approximately 6% of the students reported a high school engagement of 7. For these students 71.9% had a mean LAC score at or above the mean, 65.7% had an ACL score at or above the mean, and 73.8% had a mean SFI score at or above the mean.

In addition, we found that the relationship between level of high school academic engagement and academic engagement in college was generally stable across student types (gender, minority status, etc) and institution types (Carnegie classification, public/private, etc). Additional results regarding the stability between level of high school academic engagement and college academic engagement across types of students and institutions will be included in the presentation.

Clearly the use of prior high school engagement as a predictor of future academic engagement has merit. To the extent that institutions value student academic engagement, there may be good reason to start considering high school academic engagement as an indicator of readiness. This session will also include ample time for audience to ask questions and discuss the relevance and validity of these results.

Table 2. Percentage of respondents at each level of high school engagement and the percent at or above the NSSE scale mean

Level HSAcad	Percent	NSSE Scale Mean			Percent at or above Scale Mean		
		LAC	ACL	SFI	LAC	ACL	SFI
0-1	0.4%	44.2	32.1	24.4	18.4%	21.1%	28.0%
2	2.9%	46.2	33.5	25.6	25.0%	18.8%	30.2%

3	12.0%	48.8	36.2	28.0	29.3%	22.6%	35.3%
4	25.2%	51.9	39.7	31.2	39.2%	31.3%	45.3%
5	26.7%	55.5	44.0	35.5	50.8%	43.4%	57.1%
6	19.8%	58.7	48.1	39.7	62.6%	55.6%	66.8%
7	9.0%	61.6	52.5	44.5	71.9%	65.7%	73.8%
8	3.3%	64.3	56.2	49.8	77.9%	73.0%	81.1%
9-10	0.7%	68.0	63.2	57.9	83.6%	82.9%	87.7%

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