

Impact of AB705 on Transfer-Level MAT/ENG Enrollment and/or Success

Hartnell College examined the impact that AB705 initiatives have had on transfer-level math and/or English enrollment and/or success since its launch at Hartnell College in 2019FA. The primary research questions and summary of our findings were:

- **Have the AB705 initiatives positively impacted transfer-level ENG/MAT enrollment at Hartnell College?**
 - **Yes**, the number of students who start with a transfer-level English and/or math course has increased by 82.3% since AB705 was launched in 2019FA.
- **Have the AB705 initiatives negatively impacted transfer-level ENG/MAT success at Hartnell College?**
 - **No**, an analysis of pre/post AB705 student success found that AB705 has had no significant impact on student success. The average success rate among students who started in a transfer-level English course during the 2019-20AY was 60.3%, which was not significantly different from the 65.7% ratio in 2018-19AY. Similarly, the average success rate for transfer-level math courses was 64.3%, which was not significantly different from the 65.0% in the 2018-19AY.
 - Note: [Prior studies](#) have found that the transition to online courses and/or COVID-19 restrictions led to higher than normal course withdrawals in 2020SP and/or 2020FA, and that restricting this data resulted in no significant change to in-class success ratios pre/post pandemic.

We began by identifying students who've enrolled at Hartnell since 2017SU, their first English and/or math course, their educational goals and whether their first English and/or math courses were pre-transfer or transfer-level sections. The results show that the number of students who began in transfer-level English and/or math has increased dramatically since the launch of AB705 in 2019FA. We can also see that the number of students who began in a pre-transfer English and/or math course has decreased dramatically since the 2019-20AY.

AY	SUBJECT	TRANSFER_LEVEL	TRANSFER_SUCCESS	SUCCESS_RATIO	PRE_TRANSFER
2017-18	ENG	632	433	68.5%	1019
2018-19	ENG	1307	865	65.7%	815
2019-20	ENG	2400	1489	60.3%	84
2020-21	ENG	2287	1388	58.0%	70

AY	SUBJECT	TRANSFER_LEVEL	TRANSFER_SUCCESS	SUCCESS_RATIO	PRE_TRANSFER
2017-18	MAT	268	203	75.7%	1325
2018-19	MAT	734	492	65%	1109
2019-20	MAT	1438	946	64.3%	559
2020-21	MAT	1500	877	53.2%	416

In order to determine the impact of AB705 on transfer-level enrollment and/or success, we need to account for any potential bias like the fact that students from the 2017-18AY cohort could take their first English course during the 2018-19AY or 2019-20AY. By targeting students who took their first

Impact of AB705 on Transfer-Level MAT/ENG Enrollment and/or Success

transfer-level English and/or math course during their first year, we found that the number of students who began in a transfer-level English course (e.g., ENG-1A/ENG-1AX) in their first-year increased by 82.3% between 2018-19AY and 2019-20AY, while the number of students who began with a transfer-level math course also increased by 82.3% over the same period. As a result, 67.2% of the students who began in the 2019-20AY ($2,711 * .672 = 1,822$) started in an introductory transfer-level English course and 37.8% ($2,711 * .378 = 1,024$) started in an introductory transfer-level math course. The most likely explanation for this dramatic increase is the launch of AB705 at Hartnell College. The number of students starting in transfer-level ENG/MAT courses during the 2020-21AY was also higher than the pre-AB705 cohorts.

Note: The apparent decrease in ENG/MAT enrollment among the 2020-21AY cohort may be the result of COVID-19 withdrawals, or normal fluctuations in enrollment data. We will continue to monitor these trends.

AY	Y1 Stu	2017-18	2018-19	2019-20	2020-21	% FY Enroll	% Enroll Change	% Success
2017-18	2923	632	200	156	73	21.6%		68.5%
2018-19	3002		1107	422	221	36.9%	70.5%	65.7%
2019-20	2711			1822	301	67.2%	82.3%	60.3%
2020-21	2844				1692	59.2%	--	58.0%
Total		632	1307	2400	2287			

AY	Y1 Stu	2017-18	2018-19	2019-20	2020-21	% FY Enroll	% Enroll Change	% Success
2017-18	4096	268	112	119	63	9.2%		75.7%
2018-19	4640		622	295	238	20.7%	126.0%	65.0%
2019-20	4228			1024	266	37.8%	82.3%	64.3%
2020-21	3819				933	32.8%	--	53.2%
Total		268	734	1438	1500			

The results of a Logistic regression of first-year student success that includes first-term GPA, pre/post AB705 flag and student demographic data found that first-term GPA was the most significant and meaningful factor in student success for transfer-level English and/or math courses, and that the launch of AB705 had no significant impact on ENG/MAT in-class success rates (pre/post AB705 English $p = 0.292$; pre/post AB705 Math, $p = 0.395$). Furthermore, an examination of ENG/MAT success within first-term GPA groups (e.g., GPA_Under_1.9, GPA_1.9-2.9, and GPA_at_least_3.0) found that students within each group, were no more likely to succeed when compared pre/post AB705).

- NOTE: The potential impact of students who've taken English and/or math courses in their first term on their first-term GPA was negligible given that the average number of courses taken in their first semester was 3.52 courses. On average 50% of the students in this study took a transfer-level English course in their first term, while only 35.7% took a transfer-level math course in their first semester, and only 17% took English and math in their first semester.
- Although the proportion of students within GPA groups has changed since the launch of AB705 due to increased eligibility, the proportion of students within these GPA Groups appears to be stable as students with a first-term GPA_at_least_3.0 in transfer-level English

Impact of AB705 on Transfer-Level MAT/ENG Enrollment and/or Success

courses represent approximately 45.5% of the total population, while students with a first-term GPA_1.9-2.9 represent 19.6%, and students with a first-term GPA_Under_1.9 represent 34.9% of the total population. At the same time the proportion of successful students in each GPA groups has remained relatively stable over this period.

- The proportion of students in transfer-level math courses has also been stable since the 2019-20AY with students with a first-term GPA_at_least_3.0 representing approximately 47.7% of the total population, while students with a first-term GPA_1.9-2.9 represent 20.1%, and students with a first-term GPA_Under_1.9 represent 32.1%. At the same time the proportion of successful students in each GPA groups has remained relatively stable over this period.