

Examining In-Course Success by Modality during the Pandemic

The Office of Institutional Research, Planning, and Effectiveness (IPRE) has reviewed the enrollment and success data for Hartnell College, since the 2017-18AY, to determine if the pandemic and/or transition to online courses has had an impact on in-course success. We'd like to acknowledge the work of the Curriculum & Scheduling staff who identified the 'actual' instructional methods for each course section during the 2020SU, 2020FA & 2021SP semesters. This was an invaluable step in developing and aligning the data for this study and the development of the following variables:

Lab Sections: Any course sections with any portion of a lab-type component, in accordance with Senate Bill 129 standards

Lectures Only: Any course sections that consist of ONLY lecture components, no lab components, in accordance with Senate Bill 129 standards

FULLY IN-PERSON: Any course section with no option for at a distance student participation, in accordance with Senate Bill 129 standards

DISTANCE ED.: Any course section in which participation is limited to Asynchronous/Synchronous Online and/or Fully Correspondence and no in-person requirements, in accordance with Senate Bill 129 standards

HYBRID: any modality that does not fit into the FULLY IN PERSON and/or DISTANCE_ED categories or any combination of those options, in accordance with Senate Bill 129 standards

Meta_Majors: subjects that correspond with meta-major programs (e.g., MAT = STEM, WLD =AG, BUSINESS & INDUSTRY').

- o Note: 'APP', 'JAJ', 'JFS', 'HSE', 'WCD', 'COU', 'CWE', 'LSK' subjects do not align with any current meta-major standard, so they're classified as NOT_META_MAJOR.

Degree/Transfer Vs Skills/Employment: term-based on student educational goals (e.g., A, B, C, or M), as outlined by the CCCC in the AB705 Validation Template

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Differences in the mean: flagging in-course success rates when cohorts that were 5% lower than the annual success rates that had at least 10 enrollment records.

Note: We conferred with several IR offices on this approach. They all concurred that it was consistent with their methodology, and praised the inclusion of the Logistic Regression.

Summary of In-Course Success pre/post Pandemic

Research Question: Has the transition to online coursework had a negative impact on in-course success when compared with pre-pandemic data?

No, there were a few indications of disproportionate impact for in-course success rates when disaggregated by Instructional Method, Race/Ethnicity, Gender, Meta-Major, Lab/Lectures and/or Degree/Transfer/Employment, based on the 80% Index. However, most of these cases

during the 2020-21AY. These are typically high-achieving student groups which could be considered as potential outliers when weighing these results.

Note: JPA student records were restricted, as the shift to online coursework is unlikely to impact these students.

In-Course Success by Modality

Research Question: Has the transition to online coursework had a negative impact on in-course success by Modality, when compared with pre-pandemic data?

No, although, a few groups were flagged as being potential disproportionately impacted, based on the 80% Index, there were fewer than ten enrollment records in each instance. The CCCCCO typically restricts data with fewer than 10 records due to the potential for sampling error (i.e., variance among small samples).

A review of the difference in the mean indicates that the in-course success ratio has improved over time (column Q, R, S) when disaggregated by race/ethnicity and gender, given that these differences are more aligned during the 2019-20AY and 2020-21AY. Most of the student groups flagged for potential disproportionate impact may

students in 2017-18AY, 17 students in 2018-19AY, 26 students in 2019-20AY and 23 students in 2020-21AY).

In-Course Success by Meta-Major

There were a few differences in the mean success rates, when disaggregated by demographic groups, which represent relatively small groups (~50 enrollment records), which may indicate sampling error.

In-Course Success by Degree/Transfer Vs Skills/Employment

Research Question: Has the transition to online coursework had a negative impact on in-course success by Degree/Transfer Vs Skills/Employment, when compared with pre-pandemic data?

No, there were no indications of disproportionate impact for in-course success when disaggregated by gender, race, and ethnicity that would not be restricted for sample size ($n < 10$), based on the 80% Index.

There were a few differences in the mean success rates, when disaggregated by demographic groups, but there was no consistency over time.