



ZTC Success Rate Update

Fall 2023

Data Extract

April 24, 2024

Context

This document includes section count and success rate data for Zero Textbook Cost (ZTC) sections at San Diego City, Mesa, and Miramar Colleges in Fall 2023. This data is provided to inform a Distance Education report to the Chancellor's Cabinet.

ZTC data in this briefing is sourced from a Campus Solutions query that identifies sections shown in the online course registration system with a ZTC logo; this functionality is not supported for the College of Continuing Education.

Definitions

- **On-ground:** Courses in which students and professors occupy the same physical location at the same time. These courses may be delivered on-campus at an SDCCD instructional facility or off-campus, such as at a high school under the CCAP program. These courses are not considered Distance Education.
- **Online & On-ground:** Courses that require students to participate both online and on-ground. Online & On-ground courses include hybrid and partially online sections. These courses are considered Distance Education.
- **Online:** Courses in which students and professors do not occupy the same physical location at the same time; at SDCCD, online coursework is often completed through the Canvas learning management system. Online courses include online-live (synchronous) and fully online (asynchronous) courses, as well as Hyflex courses (in which students have the option of attending each class meeting either online or in-person, and in which students may participate entirely online). These courses are considered Distance Education.
- **Success rate:** The percent of enrollments out of total census enrollments that receive a passing grade.
- **Zero Textbook Cost, ZTC:** Sections that either include no textbooks, textbooks available at no cost to the student, or supplementary material available at no cost to the student. Course materials available in ZTC sections are often available as Open Educational Resources (OER).

Methodology

1. Sections are labeled as ZTC or non-ZTC based on data available in the Campus Solutions query X_IR_ZTC_QUERY. This query reflects data shown in the online course registration system for courses offered at San Diego City, Mesa, and Miramar Colleges.
2. Section counts include active sections and exclude tutoring and credit-by-exam.
3. Success rates are shown for “comparable courses” – i.e. courses which were delivered both across ZTC and non-ZTC formats across the credit colleges. This parameter is used to control for course-level effects on success rates, which can be significant. Additional parameters to control for course+modality variation were considered, but discarded as they resulted in a set of courses too small to be useable.

- ZTC Sections:** There were 463 Zero Textbook Cost (ZTC) sections in Fall 2023, 11% of all sections at the credit colleges. ZTC sections were most prevalent among online sections, accounting for 14% of all online sections, compared to 10% of on-ground sections and 9% of online & on-ground sections.

ZTC sections were most prevalent at City College (15% of total sections) and accounted for similar percentages of sections at Mesa (10%) and Miramar (9%).

Table 1. Sections at Credit Colleges, Fall 2023, by Zero Textbook Cost (ZTC) Status

		On-ground		Online & On-ground		Online		Total	
		Count	%	Count	%	Count	%	Count	%
City College	ZTC	76	12%	8	6%	89	21%	173	15%
	non-ZTC	563	88%	125	94%	326	79%	1,014	85%
	Total	639	100%	133	100%	415	100%	1,187	100%
Mesa College	ZTC	88	9%	21	11%	82	12%	191	10%
	non-ZTC	894	91%	172	89%	585	88%	1,651	90%
	Total	982	100%	193	100%	667	100%	1,842	100%
Miramar College	ZTC	42	9%	16	10%	41	10%	99	9%
	non-ZTC	451	91%	141	90%	359	90%	951	91%
	Total	493	100%	157	100%	400	100%	1,050	100%
Credit College Total	ZTC	206	10%	45	9%	212	14%	463	11%
	non-ZTC	1,908	90%	438	91%	1,270	86%	3,616	89%
	Total	2,114	100%	483	100%	1,482	100%	4,079	100%

Sections 2 and 3 of this document compare success rates between ZTC and non-ZTC courses for “comparable courses” – courses which were delivered in both ZTC and non-ZTC formats across the colleges. This parameter is imposed to control for course-level effects on success rates, which may be significant. Additional parameters to control for course+modality variation were considered but discarded as they excluded too many courses.

The comparable courses parameter resulted in a comparison of 369 ZTC sections and 1,307 non-ZTC sections, excluding 94 ZTC sections (that were not offered in non-ZTC formats) and 2,309 non-ZTC sections (that were not offered in ZTC formats). See Table 2 on next page for full section counts in comparable sections.

See pages 4 and 5 for success rate data of these comparable sections.

Table 2. Comparable Sections at Credit Colleges, Fall 2023, by Zero Textbook Cost (ZTC) Status

		On-ground		Online & On-ground		Online		Total	
		Count	%	Count	%	Count	%	Count	%
City College	ZTC	47	17%	4	6%	64	32%	115	21%
	non-ZTC	229	83%	65	94%	133	68%	427	79%
	Total	276	100%	69	100%	197	100%	542	100%
Mesa College	ZTC	80	25%	18	25%	63	18%	161	22%
	non-ZTC	239	75%	54	75%	289	82%	582	78%
	Total	319	100%	72	100%	352	100%	743	100%
Miramar College	ZTC	41	31%	15	21%	37	20%	93	24%
	non-ZTC	90	69%	58	79%	150	80%	298	76%
	Total	131	100%	73	100%	187	100%	391	100%
Credit College Total	ZTC	168	23%	37	17%	164	22%	369	22%
	non-ZTC	558	77%	177	83%	572	78%	1,307	78%
	Total	726	100%	214	100%	736	100%	1,676	100%

Note. Section counts above reflect courses which were delivered in both ZTC and non-ZTC formats across the colleges.

2. Overall ZTC Success Rates: Overall success rates were 2% higher in ZTC sections than non-ZTC sections in Fall 2023. By modality, ZTC success rates were higher in online courses, both across the credit colleges and at each college.

There was some variation in success rate comparison by college and modality, largely accounted for by differences in course offerings in each modality and outcomes of those courses. For example, low success rates in ZTC sections in the Online & On-ground modality at Mesa and Miramar colleges were largely reflective of lower success rates in ZTC math courses, which either weren't offered as non-ZTC courses in that modality at that college (Mesa) or had lower success rates than the non-ZTC offerings in that modality at that college (Miramar).

Table 3 below shows success rates in ZTC sections compared to comparable non-ZTC sections. The green-colored cell indicates the format of course (ZTC or non-ZTC) with the higher success rate in that modality at that college. For example, ZTC success rates were higher in online classes at City College than non-ZTC success rates.

Table 3. Success Rates in ZTC and non-ZTC courses, comparable sections

		On-ground	Online & On-ground	Online	Overall
City College	ZTC	74%	69%	71%	72%
	non-ZTC	66%	55%	66%	65%
	Total	68%	56%	68%	66%
Mesa College	ZTC	72%	65%	76%	73%
	non-ZTC	69%	77%	72%	71%
	Total	70%	75%	73%	72%
Miramar College	ZTC	76%	55%	74%	72%
	non-ZTC	77%	80%	73%	75%
	Total	77%	74%	73%	74%
Credit College Total	ZTC	73%	60%	74%	72%
	non-ZTC	70%	71%	71%	70%
	Total	70%	69%	71%	71%

Note. Excludes courses that were not offered in both ZTC and non-ZTC formats in Fall 2023.

Table 3 above shows success rates in courses that were offered in both ZTC and non-ZTC formats. The success rate for *all* ZTC sections in Fall 2023 was 73% (City: 73%, Mesa: 73%, Miramar: 72%).

- All ZTC sections on-ground: 74% (City: 76%, Mesa: 72%, Miramar: 76%)
- All ZTC sections online & on-ground: 62% (City: 70%, Mesa: 66%, Miramar: 57%)
- All ZTC sections online: 73% (City: 71%, Mesa: 75%, Miramar: 73%)

3. ZTC Success Rates by Ethnicity: In Fall 2023, success rates were higher in ZTC sections than non-ZTC sections for all ethnicities except Multi-ethnicity, Native American, and Pacific Islander students.

Success rates for African American students were 5% higher in ZTC sections than non-ZTC sections and were 4% higher for Latinx students. Furthermore, these groups indicated in a Fall 2023 survey that the availability of Open Educational Resources (OER) and ZTC was more important in their enrollment decisions than other groups did¹. These findings are evidence that ZTC course offerings and clear messaging about their availability are important to equitable course access and outcomes.

Table 4 below shows success rates in ZTC sections compared to comparable non-ZTC sections. The green-colored cell indicates the format of course (ZTC or non-ZTC) with the higher success rate in that modality at that college. For example, ZTC success rates were higher in online classes at City College than non-ZTC success rates.

Table 4. Success Rates in ZTC and non-ZTC courses by Ethnicity, comparable sections

		On-ground	Online & On-ground	Online	Overall
African American	ZTC	65%	49%	70%	67%
	non-ZTC	63%	58%	63%	62%
	Total	63%	57%	65%	63%
Asian	ZTC	84%	75%	86%	84%
	non-ZTC	77%	85%	85%	83%
	Total	79%	83%	85%	83%
Filipino	ZTC	81%	52%	80%	78%
	non-ZTC	76%	74%	76%	76%
	Total	77%	71%	77%	76%
Latinx	ZTC	69%	53%	69%	68%
	non-ZTC	64%	64%	65%	64%
	Total	65%	62%	66%	65%
Multi-Ethnicity	ZTC	74%	50%	73%	71%
	non-ZTC	74%	72%	71%	72%
	Total	74%	69%	71%	72%
Native American	ZTC	67%	0%	71%	64%
	non-ZTC	74%	60%	61%	66%
	Total	73%	56%	63%	66%
Pacific Islander	ZTC	38%	17%	65%	49%
	non-ZTC	72%	82%	67%	71%
	Total	63%	68%	66%	65%
White	ZTC	88%	83%	82%	84%
	non-ZTC	78%	82%	77%	78%
	Total	81%	83%	78%	80%

Note. Excludes students with Unreported ethnicity. Excludes courses that were not offered in both ZTC and non-ZTC formats in Fall 2023.

¹ Distance Education Experience Survey, Fall 2023