

Burden-Free Instructional Materials Data Analysis

Taskforce Meeting #1, January 11, 2023

Presenters

- Allison Beer, *Research Data Specialist, California Community Colleges Chancellor's Office*
- Shuai Li, *Research Data Specialist, California Community Colleges Chancellor's Office*

Presentation Objectives

- Present data on the landscape of CCC zero textbook courses (ZTC) and students' expenses for textbooks and related materials;
- Inform taskforce members in order to support data-driven decision making for the future of the ZTC program; and
- Identify potential areas for additional data analysis to inform equitable program design.

Research Questions

- What are estimated CCC students' expenses for textbooks and related instructional materials?
- What is the current landscape of zero and low-cost textbook courses across the CCC system?
 - How many courses and sections are offered? What program areas are most common?
 - How many students participate?
 - Are there differences in student outcomes between ZTC and non-ZTC courses?

Students' Expenses for Books and Supplies

Textbook Costs are Part of Students' Total Expenses

- For the 2021-22 academic year, California higher education students spent \$938 (average) per year on books and supplies
- Non-tuition expenses totaled over \$26,500 (average)
- Though textbook and supplies have decreased in recent years, total cost of attendance has increased

Average Yearly Expenses for California Higher Education Students (off-campus)	
Books and Supplies	\$938
Food	\$6,471
Housing	\$12,960
Transportation	\$1,764
Personal	\$4,428
Total	\$26,561

Source: California Student Aid Commission, 2021-22 Student Expenses and Resources Survey (SEARS)

Most CCC students spend up to \$500 on books, and up to \$400 for other supplies

- According to 2021-22 SEARS data, 84% of CCC respondents spent between **\$1-\$499 per year on textbooks**
 - Students' other expenses included \$1-\$199 for technology (68% of respondents);
 - \$1-\$199 for supplies (91%) ;
 - \$1-\$199 for materials (60%)
- Black and Native American students were more likely to report higher textbook costs than their peers
- 31% of respondents reported they did not have enough resource to pay for books and supplies

Source: Chancellor's Office analysis of SEARS data

Zero and Low-Cost Textbook Course

Systemwide ZTC Data Collection is New and Evolving

- Systemwide data collection of ZTC section began in Summer 2022 (Management Information System data element XB12), following additional state funding for the Zero Textbook Cost Degree Program
 - Through XB12, the Chancellor's Office seeks to gather data course instructional material costs including those that have zero or low-costs, or use digital instructional materials only
- Many colleges that have received funding are in the process of implementing data collection and reporting. Typically, it takes about 2 years of data collection and reporting for new data elements to be reliable.
 - To date, among the 43 ZTC planning and implementation grants awardees, over half have reported 0 ZTC courses/sections to MIS.
- The analysis of XB12 data included in this presentation reflects very early data collection.
 - Findings are preliminary until additional terms of data are available.
 - Because program implementation and data collection/reporting are still in early stages, the data included in this presentation do not show trend or reflect causal relationships between the availability of ZTC courses, students' preferences, or their outcomes.

As of Summer '22, 15% of Course Sections were Reported as ZTC

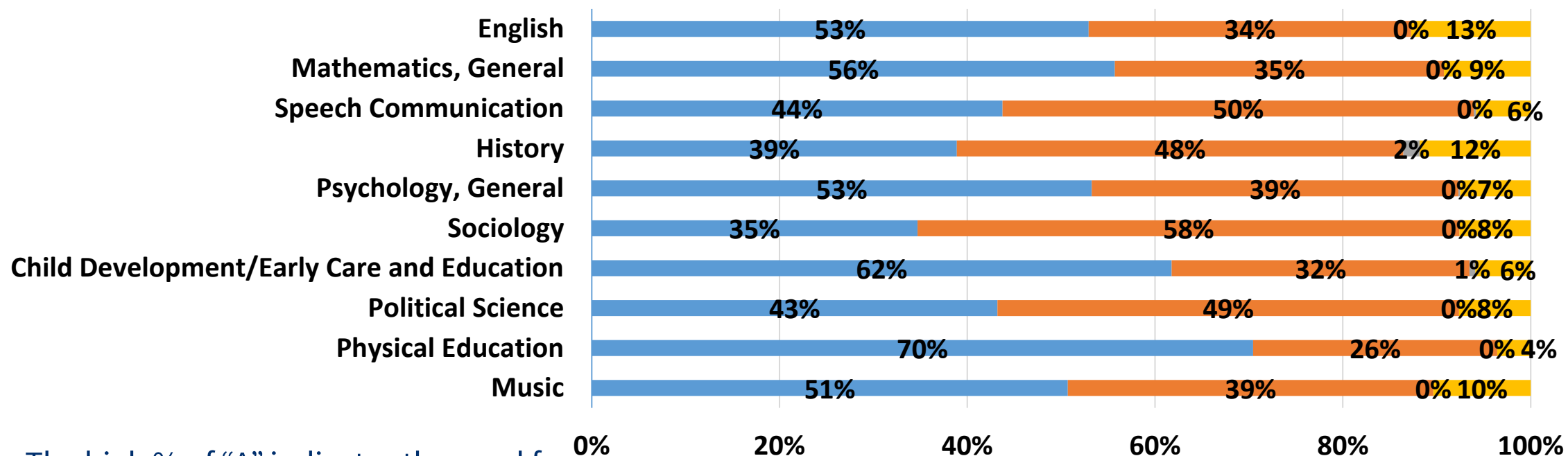
- Across the system, ZTC includes:
 - 213,022 student enrollments
 - 8,471 sections
 - 4,069 courses
- As of Summer '22, 15% of course sections were reported as having zero or low textbook costs
 - This reflects one term of required systemwide reporting. The Chancellor's Office anticipates that the frequency of reporting may change as colleges continue to implement XB12 data collection and reporting

ZTC Sections Systemwide

Term	Not reported	Not ZTC	ZTC*	Total
Summer 2021	98%	2%	0% (62)	100% (41,778)
Fall 2021	99%	0%	1% (2122)	100% (145,175)
Spring 2022	95%	3%	1% (1830)	100% (140,401)
Summer 2022	0%	85%	15% (4457)	100% (29,916)
Grand Total	89%	9%	2% (8471)	100% (357,270)

*ZTC sections include those reported as XB12=A,B,C, or D

Most Enrollments in ZTC Sections are in English and Math; Most Are Reported as Having No Textbook or Digital Materials Only



- The high % of “A” indicates the need for further clarification and guidance on XB12 coding, as it is unlikely the rate of courses without instructional materials is as high as currently reported.

A = Section has no associated instructional material
 B = Section uses only no-cost digital instructional material
 C = Section has instructional material costs none of which are passed on to students
 D = Section has low instructional material costs (as defined locally)
 *See appendix for course titles

Most ZTC Sections are Credit-Degree Applicable and Transferable

CREDIT STATUS	COUNT	PERCENT OF ZTC SECTIONS
Credit – Not Degree Applicable	537	6%
Credit – Degree Applicable	7566	89%
Noncredit	368	4%
Total	8471	100%

TRANSFER STATUS	COUNT	PERCENT of ZTC Sections
Transferable to both UC and CSU	5522	65%
Transferable to CSU only	1588	19%
Not transferable	1361	16%
Total	8471	100%

Student Completion is Slightly Higher in ZTC Sections for the Same Course

- Students in ZTC sections have slightly higher completion rate than students in non-ZTC sections (systemwide)
- The difference in students' completion rates between ZTC and non-ZTC sections is statistically significant; however, this analysis is correlational and **does not** demonstrate a causal relationship
- The difference in section enrollment **does not** indicate students' preference in ZTC/non-ZTC sections – it might be related to section availability and other factors
- The Chancellor's Office intends to further analyze outcomes for students participating in ZTC courses as additional terms of data are reported

	ZTC Sections	Non-ZTC Sections
Completion Rate	80.1%	77.6%
Section Enrollment	52,205	67,622

Key Take Aways

- The Chancellor's Office analysis of CSAC SEARS data found that most California Community College students spend up to \$1,100 per year on books, supplies, materials, and technology.
 - Total costs of attendance has increased in recent years, likely impacting students' ability to pay for course books and supplies.
- In Summer '22, the Chancellor's Office implemented required systemwide reporting of no- and low-cost textbook courses (ZTC), through the XB12 data element. Typically, it takes approximately 2 years for implementation of new data elements and for reliable systemwide data to be available.
- Early data indicates 15% of sections system-wide are ZTC. Over 200,000 students have enrolled in ZTC sections and have slightly higher completion rates than students enrolled in non-ZTC courses.
 - However, further data collection is needed to analyze trends in course availability, students' preference, and their outcomes.

Appendix:

TOP 10 ZTC Enrollment Course Titles Examples

- **English:** Adv Writing Across Curriculum, Business English, Critical Reasoning, Freshman Composition, Shakespeare
- **Math:** Algebra Readiness, Calculus for Business and Econ, Differential Equations, Intro Probability & Statistics
- **Speech Communication:** Public Speaking, Fundamentals of Public Speaking, Intercultural Communication
- **History:** History of World Civ To 1500, Women In U.S. History, History of California, US History Since Reconstruct
- **Psychology:** Intro to Psychology, Social Psychology, Developmental Psychology, Abnormal Psychology
- **Sociology:** Introductory Sociology, Contemporary Social Problems, Understand Society, Intimate Relationships and Families
- **Child Development/Early Care and Education:** Child Growth and Development, Child, Family, and Community, Health, Safety, Nutrition in Early Childhood Education
- **Political Science:** Governments US/Calif, US Government & Politics, Introduction to International Relations
- **Physical Education:** Body Fitness/Walk/Jog, Introduction to Kinesiology, Introduction to Meditation, Volleyball
- **Music:** Basic Musicianship, Jazz Appreciation, Latin Amer Music Appreciation, Beginning Piano