City University of New York
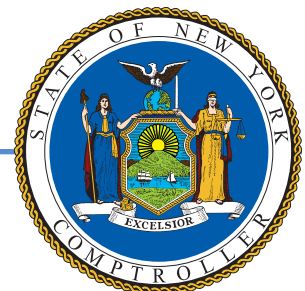
Open Educational Resources

Audit Highlights

Objectives

To determine whether the City University of New York (CUNY) is using Open Educational Resources (OER) funds to establish, sustain, and enhance new and ongoing OER initiatives at its colleges to help defray textbook costs for students, and whether the OER initiatives adequately engaged faculty in the redesign of courses using OER. Our audit covered the period from April 2017 through March 2024.

About the Program

CUNY comprises 11 senior colleges; seven community colleges; and seven graduate, honors, and professional schools located throughout New York City's five boroughs. As of the Fall 2023 semester, approximately 233,000 students were enrolled at CUNY's 25 colleges, graduate, and professional schools. The annual tuition in 2023 for a New York State resident pursuing a bachelor's degree full time at CUNY was $6,930. On top of tuition costs, CUNY estimates that students spend an average of $1,200 per year on books and other supplies. CUNY reported that the cost of books and supplies is often a barrier to academic success.

OER are any teaching, learning, and research materials that are in the public domain or are under copyright but have been released under an open license and are available to students at no or low cost. OER can be full courses, course materials, modules, textbooks, streaming videos, tests, or software. OER can be used, reused, and customized under an intellectual property license that permits their free use while ensuring authors retain copyright to their work. OER can be an alternative to traditional paid textbooks and materials.

During the 6 CUNY fiscal years ended June 30, 2023, CUNY received a total of $24 million in New York State funds to expand OER initiatives as part of an effort to create OER to reduce textbook costs. CUNY's Office of Library Services (OLS) is tasked with providing the oversight and infrastructure for distributing the OER funds. As of September 2024, CUNY's OER repository, OpenEd CUNY, contained 7,776 OER materials from multiple disciplines. This included, among other resources, 2,426 full courses, 921 modules, 913 textbooks, and 489 assignments.

To assist students in identifying OER courses, CUNY requires that all OER courses, both State-funded and non-State-funded OER, be designated as ZTC (Zero Textbook Cost) in CUNYfirst, CUNY's system for course registration. Since November 2018, CUNY has published six annual OER reports that, among other high-level information, present student cost savings data. In February 2024, CUNY reported that, as of Fall 2023, 46,608 course sections had been converted to OER, yielding an aggregate savings of $108,172,100 across 1,081,721 students.

Key Findings

The use of OER has the potential to generate significant cost savings for students and reduce barriers to academic success, making it a valuable initiative. To maximize the effectiveness and transparency of CUNY's OER program, improvements are needed in oversight and accountability. This includes the implementation of formal, system-wide policies and procedures to ensure that OER funds are spent responsibly and tracked effectively. For example, among our key findings:

- CUNY did not track $17,674,400 of the $24 million in OER funds received from the State for the 2018–2023 CUNY fiscal years. As a result, it is not clear how much of the $24 million was spent and, if spent, for what purposes. This includes:

- $10,615,757 in expenses ($9,327,812 in personal services and $1,287,945 in other than personal services [OTPS]) that was reportedly spent but for which CUNY could not provide transaction details or supporting documentation. As such, we have no assurance the funds were used for course conversion and OER activities.
  - $7,058,643 that CUNY could not account for, and we have no assurance whether it was used for its intended purpose or if it was even used.
- CUNY also spent $238,094 in OTPS expenses that were unsupported, not OER related, or questionable.

We also question the accuracy of OER reporting in CUNYfirst. While each college is responsible for marking its courses as ZTC in CUNYfirst, CUNY does not exercise sufficient oversight to ensure all OER courses are appropriately identified. We found errors and omissions, which could be misleading to students when registering for courses.

Furthermore, we question the accuracy of the student cost savings data that resulted from OER funding that CUNY reports to the public. CUNY's calculation factors in all courses labeled ZTC regardless of whether the course was developed with or without State OER funding. As a result, CUNY's reported student cost savings from State OER funding may be overstated.

Lastly, we found some faculty were reluctant or unaware of how to participate in the OER program. While OLS performs outreach to encourage OER adoption across colleges, CUNY itself could take a more active role to promote the program and address barriers to participation. Not only would this help to strengthen CUNY's OER program overall, but its potential expansion would help ensure colleges maximize their State OER allocations and provide more cost savings opportunities for students.

Key Recommendations

- Establish and document an OER fund spending and reporting policy and related procedures to ensure that OER funds are spent appropriately and tracked adequately.
- Review the $10.6 million in reported expenses ($9.3 million in personal services and $1.3 million in OTPS) to ensure that the OER funds were spent for OER creation, and account for the $7.1 million in OER allocations.
- Review the $238,094 in questionable and unsupported OER OTPS transactions and reimburse the OER allocations as appropriate.
- Ensure OER courses are consistently and accurately recorded in CUNYfirst.
- Ensure that OER conversion and cost savings estimates reported to the public are accurate and complete.
- Take steps to enhance faculty outreach to improve faculty awareness and reduce barriers to participation, and to ensure all available funds are used.

Office of the New York State Comptroller
Division of State Government Accountability

March 27, 2025

Félix V. Matos Rodríguez, Ph.D.
Chancellor
City University of New York
205 East 42nd Street
New York, NY 10017

Dear Dr. Rodríguez:

The Office of the State Comptroller is committed to helping State agencies, public authorities, and local government agencies manage their resources efficiently and effectively. By so doing, it provides accountability for the tax dollars spent to support government operations. The Comptroller oversees the fiscal affairs of State agencies, public authorities, and local government agencies, as well as their compliance with relevant statutes and their observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving operations. Audits can also identify strategies for reducing costs and strengthening controls that are intended to safeguard assets.

Following is a report of our audit entitled *Open Educational Resources*. This audit was performed pursuant to the State Comptroller's authority under Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

This audit's results and recommendations are resources for you to use in effectively managing your operations and in meeting the expectations of taxpayers. If you have any questions about this report, please feel free to contact us.

Respectfully submitted,

Division of State Government Accountability

Contents

Glossary of Terms

Term	Description	Identifier
CUNY	City University of New York	*Auditee*
BMCC	Borough of Manhattan Community College	*College*
Brooklyn	Brooklyn College	*College*
CUNYfirst	CUNY's repository of academic, student, and financial information	*System*
Hunter	Hunter College	*College*
OER	Open Educational Resources	*Key Term*
OLS	CUNY's Office of Library Services	*Office*
OTPS	Other than personal service	*Key Term*
ZTC	Zero Textbook Cost	*Key Term*

Background

The City University of New York (CUNY) comprises 11 senior colleges; seven community colleges; and seven graduate, honors, and professional schools located throughout New York City's five boroughs. As of the Fall 2023 semester, approximately 233,000 students were enrolled at CUNY's 25 colleges, graduate, and professional schools. The annual tuition in 2023 for a New York State resident pursuing a bachelor's degree full time at CUNY was $6,930. On top of tuition costs, CUNY estimates that students spend an average of $1,200 per year on books and other supplies. CUNY reported that the cost of books and supplies is often a barrier to academic success.

Open Educational Resources (OER) are any teaching, learning, and research materials that are in the public domain or are under copyright but have been released under an open license and are available to students at no or low cost. OER can be entire courses, course materials, modules, textbooks, streaming videos, tests, or software. OER can be used, reused, and customized under an intellectual property license that permits their free use while ensuring authors retain copyright to their work. OER is considered an alternative to traditional paid textbooks and materials.

During the 6 CUNY fiscal years ended June 30, 2023, New York State allocated $4 million annually to CUNY, totaling $24 million,[1] to expand OER initiatives targeting high-enrollment courses, including general education courses with the highest cost savings potential for students. The State University of New York received an equal amount for the same purpose.

CUNY's Office of Library Services (OLS) is tasked with providing the oversight and infrastructure for distributing the OER funds. OLS reviews college proposals to determine how to distribute OER funds. In addition, OLS develops and oversees all university-wide OER initiatives including collections of OER materials. According to CUNY, the OER initiative seeks to engage faculty in the redesign of courses through the replacement of proprietary textbooks with OER to decrease the cost of textbooks for students.

Over the 6 academic years ending 2023, 22 of CUNY's 25 colleges participated in OER-funded course conversions. Not all 22 colleges received an OER allocation in each of the 6 years. CUNY colleges that receive OER compensation are not required to submit expense reports to OLS. They are required to submit annually to OLS a year-end final report detailing outcomes for each course section converted, including course information, students enrolled, and textbook cost savings.

As of September 2024, CUNY's OER repository, OpenEd CUNY, contained 7,776 OER materials from multiple disciplines. This included, among other resources, 2,426 full courses, 921 modules, 913 textbooks, and 489 assignments.

CUNY has separately created "Zero Textbook Cost" (ZTC) courses, which may or may not use OER materials or OER State funds. A ZTC designation in CUNYfirst,

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1   State funds follow the New York State fiscal year (April 1–March 31). CUNY's fiscal year is July 1–June 30.

CUNY's repository of academic, student, and financial information and course registration tool, is used to indicate that a course does not require students enrolled in the class to purchase a textbook or required readings. Each participating college is required to designate their OER courses with a ZTC attribute in CUNYfirst, enabling students to readily find these courses at registration. Thus, both ZTC courses and courses developed using State OER funds are called ZTC in CUNYfirst.

Since November 2018, CUNY has published six annual OER reports that, among other high-level information, present student cost savings data. In February 2024, CUNY reported that, as of Fall 2023, 46,608 course sections had been converted to OER, yielding an aggregate savings of $108,172,100 across 1,081,721 students.

Audit Findings and Recommendations

OER can significantly reduce student costs and decrease barriers to success for students. To ensure CUNY's OER program is effective and transparent, stronger oversight is needed. Specifically, of the $24 million in State OER funds, CUNY did not track approximately $17.7 million. CUNY cannot account for $7.1 million or provide documentation that details how the remaining $10.6 million in expenses was reportedly spent. As such, we have no assurance whether the $7.1 million was used for its intended purpose, if it was ever used, or whether the $10.6 million in expenses was used for OER course conversion and OER activities. Our audit also found over $238,000 in other than personal service (OTPS) expenses that were unsupported, not OER related, or questionable. We attribute these issues largely to poor oversight by CUNY, including a lack of formal, system-wide policies and procedures to ensure that OER funds are appropriately spent and adequately tracked.

CUNY requires OER-funded courses to be labeled as ZTC courses in CUNYfirst, which indicates to students registering for courses that the course does not require them to purchase a textbook or required readings. While each college is responsible for marking its courses as ZTC in CUNYfirst, CUNY does not exercise sufficient oversight to ensure all OER courses are appropriately identified. We found instances where course labeling was not accurate, which could be misleading to students when registering for courses. Furthermore, as ZTC information in CUNYfirst is the basis for CUNY's calculation of student cost savings, we question the accuracy of the data it reports to the public.

OER course conversions are voluntary, and professors have the academic freedom to use or not use OER content. Faculty buy-in is key to the growth and success of CUNY's OER program. While OLS performs outreach to encourage OER adoption across colleges, we found that some faculty expressed resistance to participation. In addition to OLS' outreach, CUNY itself could take a more active role to promote the program and address barriers to participation. Not only would this help to strengthen CUNY's OER program overall, but its potential expansion would help ensure colleges maximize their State OER allocations and provide more cost savings opportunities for students.

OER Expenses

Personal Service Expenses

According to CUNY officials, OER-related personal service expenses comprise stipends and salaries for OER course conversion and for faculty support of the OER initiative. Prior to late 2020, colleges compensated full-time faculty for course conversion through "summer salaries." Thereafter, they were paid stipends for their involvement. Part-time faculty involved in course conversion were compensated as non-teaching adjuncts. Individuals involved in supporting faculty using and developing OER at the colleges and at OLS were compensated through salaries. CUNY compensation is processed by CUNY's Central Payroll Division, with information provided by the colleges, before it's processed by the City or State payroll, depending on the nature of the payments.

We selected a judgmental sample of three (Borough of Manhattan Community College [BMCC], Brooklyn College [Brooklyn], and Hunter College [Hunter]) of the 22 colleges that received OER allocations. We met with the colleges' OER representatives and Provost staff, as well as payroll officials from two of the sampled colleges and the Central Payroll Division, to determine the process and records maintained during processing.

As officials at the sampled colleges explained, requests for OER compensation originate from the colleges' OER representative (e.g., campus librarian), are approved by the respective college Provost, and are forwarded to that campus's Human Resources Office, which then sends it to the Central Payroll Division for processing.

According to CUNY officials, technological and accounting limitations prevent CUNY from providing transaction-level details for personal service expenses for all colleges. While our audit did identify technological limitations, we also found that CUNY officials did not establish a system-wide policy and related procedures for tracking and reporting OER fund spending, which would have otherwise ensured the availability of transaction-level details essential for thorough accounting. CUNY officials acknowledged that transaction-level tracking of OER expenses at the colleges was inadequate.

Of the sampled campuses, Brooklyn's OER representative maintains, and provided us with, transaction details of its OER expenses; at BMCC, the OER representative does not keep copies of payment requests; and Hunter does not currently have an OER representative, and Hunter officials were otherwise unable to address this. Furthermore, according to CUNY payroll officials, they do not document the reasons for compensation and the codes used to process OER payments are not unique to OER payments. As a result, without consistent expense tracking, CUNY cannot account for expenses system-wide. At BMCC, a budget official stated that she created a spreadsheet to keep track of OER stipend payment requests. However, the spreadsheets do not state when the payments were made or the course sections that relate to the payments. In addition, the spreadsheets do not support the total personal service expenses reportedly spent by the college. CUNY officials did not say whether the other colleges were doing this. While we acknowledge that the codes used to process OER payments are not unique to OER payments and thus present accounting limitations, it is nevertheless unclear why CUNY has been unable to develop a systematic, uniform way to track and account for all types of OER personal service expenses it has authorized and disbursed.

In lieu of transaction-level details from all CUNY colleges that received OER funding, CUNY provided expense reports, created by individual colleges, for 18 of the 22 colleges that participated in the OER program and for OLS during fiscal years 2018–2023 (starting with the first fiscal year CUNY received OER funds). CUNY did not provide expense reports for Hunter, Macaulay Honors College, Queens College, and Hostos Community College. Based on the expense reports received, the total personal service expenses incurred by the 18 colleges and OLS over the 6 years was $12,955,689. Three colleges' expense reports included sufficient support for

their reported personal service expenses. CUNY also provided partial support for two other colleges' reported personal service expenses. The supporting documentation accounted for $3,627,877 of the $12,955,689 in personal service expenses. CUNY did not provide transaction details to support that the remaining $9,327,812 was reportedly used for OER creation or other OER-related activities.

We also found that, for the remaining $9,327,812 in personal service expenses, there was insufficient supporting documentation, as the colleges and OLS used different methodologies to calculate their reported personal service expenses. Specifically:

- Twelve colleges, with an aggregate of $5,066,698 in personal service expenses, reported the difference between the budgeted amount and the amount of funding they had left over. Not only are these expenses not supported by transaction-level details, but we question the appropriateness of using budgeted amounts as a proxy.
  - Among the colleges' reports, we also found instances where the available budget had a positive or negative value even though the allocated budget was $0. For example, one college's 2023 expense report showed an available budget balance of $2,082.46 and an allocated budget balance of $0, yielding a negative expense of $2,082.46.
  - In addition, one of the colleges miscalculated the budget differences, overstating the amounts by $139,059 for fiscal years 2018–2021.
- Three colleges and OLS, with an aggregate of $4,261,114 in personal service expenses, simply listed total expenses by year.

Consequently, without documentation that details actual personal service expenses, there is no assurance that CUNY spent $9,327,812 for the OER program as reported. As stated earlier, CUNY officials acknowledged that transaction-level tracking of OER expenses was inadequate.

Other Than Personal Service Expenses

CUNY provided OTPS expense reports for 16 of the 22 colleges that received OER funds and for OLS for fiscal years 2018–2023, totaling $3,985,668. For three of the remaining colleges, CUNY officials stated that they did not have any OTPS transactions recorded in CUNYfirst with the code that would identify them as OER related. CUNY did not provide expense reports for the other three colleges (City College, Queens College, and Hunter).

Of the $3,985,668 in OTPS expenses, $2,697,723 was supported by OTPS transactions from CUNYfirst. The remaining $1,287,945 in expenses were not. For $966,095 in expenses, colleges reported them as the difference between the budgeted amount and the amount of funding left over. For the remaining $321,850 in expenses, the colleges listed them as total expenses by year without any details or information as to how the amounts were determined.

For OLS and the two colleges in our sample for which CUNY provided expense reports (BMCC and Brooklyn), CUNY reported spending $2,337,382

(OLS: $2,199,513; BMCC: $125,380; Brooklyn: $12,489) for the 2018–2023 fiscal years. From a judgmental sample of 104 transactions totaling $677,131 (88 from OLS totaling $554,291, 13 from BMCC totaling $121,288, and three from Brooklyn totaling $1,552), we found $238,094 in OTPS expenses that were unsupported, not OER related, or questionable.

A total of $201,616 in expenses were unsupported:

- $122,510 in subscriptions to an academic research group. CUNY did not support how this subscription relates to OER. In response, CUNY officials stated that the academic research group is a vast archive of social science data for research and instruction and data literacy is an increasingly vital skill, and therefore data sets are relevant to OER. However, this explanation and information available on the academic research group's website does not make clear the connection with OER as opposed to regular research materials.

- $39,960 for an OER website to be used by CUNY and the State University of New York, which is also a beneficiary of State OER funds. According to CUNY officials, the website no longer exists and the officials involved in this project are no longer at CUNY. They also stated that the website's development cost was fully borne by CUNY. We requested documentation to support the nature of this agreement, such as the contract with the vendor, but CUNY officials stated that there was no contract for this service and provided no other documentation. We question why CUNY paid the full amount for the website's development and maintenance when CUNY officials and the website (based on an archived copy) clearly indicate this was a joint venture.

- $27,000 paid in support of an OER multi-college initiative in 2021 and 2022. Originally, OLS officials told us that the 2021 payment was CUNY's single-year obligation, as a founder of the initiative, to pay for project management. After we found a second payment in 2022, we were informed that its obligation was for a 2-year period; however, CUNY officials did not provide any documentation that details the membership terms and conditions. CUNY provided the invoice and independent contractor agreement. However, these documents do not support the membership terms and conditions or CUNY's assertions.

- $5,035 for software training for four OLS staff. The expense was charged exclusively to OER even though only two staff worked exclusively on OER. A third staff worked partially on OER, and it was unclear how much the fourth staff worked on OER.

- $5,000 in expenses for an "open-source repository environmental scan and landscape report." CUNY officials could not provide us with the landscape report, stating that the staff who commissioned the work and received the report left CUNY in 2019. In lieu, CUNY provided an email from the contractor containing case studies on the topic and questions to ask other universities that had completed similar projects. These documents do not support that a report was created. In the absence of the landscape report, we cannot determine whether the work was completed.

- $977 (of an invoice for $3,382) allocated to OER for the purchase of two desktop computer setups in 2022. OLS stated that these were purchased for use by OLS staff to facilitate the OER program. However, it is unclear who was assigned these computers and how the invoice was allocated against OER. We also noted that two laptop computers were purchased in 2020-21 for two full-time OER staff in OLS, one of which was still in active use in 2022 and the other was available for use.

- $758 for a laptop that CUNY stated it purchased for OER use. It is not clear who this computer was assigned to as no documentation was provided to support who requested and used the laptop.

- $376 for the purchase of a textbook. CUNY officials stated that this was for library reserve based on a request. While increasing library reserves is part of OLS' mission, it is not clear how this textbook met the definition of OER materials. Further, we do not know who requested the book or how this book was used by the OER program.

Another $36,478 in expenses were not OER related or exceeded CUNY's purchasing policies, including:

- $24,160 for the purchase of access to video, photo, and print materials for which the use licenses do not meet the definition of OER materials. While faculty and students can view or read the copyrighted materials, they cannot be remixed or customized, which are key characteristics of OER materials. In addition, CUNY officials stated that the materials were requested by faculty for use in OER courses, but could not say which courses or provide the purchase requests since CUNY does not keep records of faculty requests after materials have been purchased.

- $9,897 for six computers that, according to CUNY officials, were purchased for CUNY's Resources Description and Metadata Unit, which catalogs CUNY's library system, some of which would include OER materials. We noted that the $9,897 was allocated exclusively as an OER expense even though the computers were not used exclusively for cataloging OER materials.

- $2,421 in food expenses for an internal CUNY training that exceeded the allowable amounts per CUNY's Guidelines for Meals Served on Premises for Business Meetings. CUNY officials disagreed that they exceeded the allowable amounts. However, the guidelines explicitly state that CUNY's cap on allowable meal expenses includes the cost of delivery charges and incidentals, which CUNY had excluded from its calculation of allowable amounts.

Administrative Issues

OER Funding and Reporting

OLS annually invites colleges to submit proposals for OER funding. In making its allocation decisions, OLS reviews proposals and allocates OER funds to the colleges. OLS considers the estimated enrollment, course names, number of courses and sections to be converted, and planned outreach to faculty and students.

OER allocations are provided to colleges through award letters. OLS officials stated that they ensure the OER budget is fully allocated every year to the colleges and OLS.

For the 6 fiscal years ending June 30, 2023, we reviewed the proposals, award letters, and OLS' expense reports, which indicate the amount of OER funding each college was allocated. We found:

- CUNY did not budget $93,862 ($4,388 in 2018 and $89,474 in 2022) of the $24 million OER allocation.

- Four colleges that submitted proposals and received an aggregate of $290,000 in OER allocations ($212,000 for the Graduate Center in 2018, $35,000 for Medgar Evers College and $3,000 for the School of Journalism in 2019, and $40,000 for Hunter in 2020) did not have award letters or other documentation to support the allocations. OLS officials stated that initial award letters are not updated to reflect advance payments and additional allocations provided to colleges. They further stated that the $40,000 Hunter allocation was to hire a non-teaching adjunct in the library only, which did not require an award letter. However, we note there is no written policy on how the proposal process, including issuing award letters, works and it is unclear what is required.

Notwithstanding the reliability of the expense reports, based on the information provided for fiscal years 2018–2023, colleges and OLS reported spending $16,941,357 ($12,955,689 in personal service and $3,985,668 in OTPS)—far less than the $23,906,138 allocated ($24,000,000 - $93,862 not budgeted). We asked officials at the sampled colleges how unspent allocations are managed. CUNY officials stated that, at Brooklyn, the OER representative would request a rollover of the unspent OER funds and assign the funding in the next fiscal year. BMCC officials explained that unspent OER funds become part of BMCC's operating budget. OER monies not spent by OLS are left as unused appropriations. OLS officials stated that the colleges are responsible for tracking their own expenses and that OLS tracks its own expenses. While colleges are required to track their OER expenses, without university-wide monitoring of OER spending, there is a risk of unspent allocations.

Notwithstanding the reliability of the personal service expense reports, based on the information provided for fiscal years 2018–2023, CUNY reported spending $16,941,357 of the $24 million in OER funds ($12,955,689 in personal services and $3,985,668 in OTPS). CUNY cannot support that the remaining $7,058,643 ($24,000,000 - $16,941,357) was used for OER course conversion and OER activities. Thus, we have no assurance these funds were used for their intended purpose or if they were ever used.

Colleges' OER Year-End Final Reports

Colleges that receive OER allocations are required to submit annually to OLS a year-end final report detailing the outcomes for each course section converted. The report template, which OLS created to help colleges in their required reporting, includes fields to identify the specific course section, student enrollment, and

textbook cost savings. However, we found that CUNY did not exercise sufficient oversight to ensure that colleges submitted the required reports or that the required information from the template was complete and accurate.

We reviewed the year-end final reports for the 6 academic years 2018–2023 and found that seven colleges did not submit year-end final reports for the years they received OER funds (two in 2018, two in 2019, two in 2020, three in 2022, and three in 2023); three of the seven did not submit multiple years' reports. In response, OLS officials stated they were aware that the colleges did not submit the required reports and had asked these colleges to submit them, but did not provide evidence that a request was made.

For the three sampled colleges, we found their reports consistently lacked critical information such as course section details (e.g., Math 1006, "College Algebra," with section number ECB) and professor names, which are needed to properly identify which courses were converted. We also note that the template does not include a field for the Course ID, which is a unique course identifier. OLS officials stated they were unaware the Course ID was the unique course identifier and so did not include it in the report template.

When asked whether and how they check the accuracy of the year-end final reports, OLS officials explained that, in the past, they did this on a sample basis and found that many converted course sections were not marked properly in CUNYfirst with the ZTC attribute. However, when requested, OLS did not provide us with the sample size and methodology used or documentation detailing these checks. OLS officials also stated that the process for reporting the ZTC attribute in CUNYfirst is the responsibility of the colleges and that the college registrars are responsible for updating the ZTC attribute in CUNYfirst. They added that the instructors who converted and taught the ZTC courses were responsible for communicating the change to their department chairs or course coordinators. For the sampled colleges, the department chairs whom we interviewed stated they communicate the changes to the registrars but do not verify that the changes were made. OLS officials stated that they remind colleges to update the ZTC attribute but did not provide support for this assertion.

We reviewed a sample of 29 ZTC course sections, randomly selected from the three sampled colleges, taught between the Summer 2017 and Spring 2023 semesters to determine whether these course sections were reported on the colleges' year-end final reports. Of the 29 ZTC course sections, four were reported on the year-end final reports, indicating they were OER funded. We requested syllabi for the four course sections. CUNY provided three syllabi; however, one was for a different course section and professor than sampled. The remaining two course sections were adequately reported on the year-end report because they used OER materials. Based on the limited number of syllabi available (two of four), we cannot draw any conclusions on whether the year-end reports accurately reflect course conversions. CUNY officials stated that CUNY's record retention and disposition schedule does not require colleges to retain syllabi. OLS also stated that, beyond the college

year-end reports (which are not used for public reporting), there is no tracking of OER-funded course conversions.

We also used the random sample of 29 ZTC course sections to determine if professors who reported converted course sections on the year-end final reports received OER payments. Of the four course sections that were reported on the year-end final OER reports, CUNY officials provided payroll and other documentation to support that the payments were made. However, given the small number of course section/year-end report matches that our sample yielded, we cannot make any conclusion on whether professors who reported OER-funded course conversions received OER payments.

ZTC Labeling in CUNYfirst

CUNY requires OER-funded courses to be labeled as ZTC courses in CUNYfirst. For students registering for courses, the ZTC attribute means the course does not require the student to purchase a textbook or required readings. As reported earlier, according to OLS officials, college registrars are responsible for updating the ZTC attribute in CUNYfirst and the instructors who converted and taught the ZTC courses are responsible for communicating the change to their department chair or course coordinator. However, we found CUNY did not exercise sufficient oversight to ensure all OER courses are appropriately identified as ZTC in CUNYfirst.

In addition to the course syllabi for the 29 course sections discussed previously, we requested syllabi for a second sample of course sections to determine whether they were correctly identified as ZTC courses in CUNYfirst. From the second sample, we judgmentally selected 31 Fall 2023 English, Mathematics, and Music course sections, for a total of 60 course sections. CUNY provided 41 of the 60 syllabi, and advised that 19 could not be provided because either they were not available or the professors had retired. Of the 41 syllabi, eight did not match the course information (e.g., course section or professor) in CUNYfirst or the links to the syllabi were broken. Three of the remaining 33 syllabi (9%) indicated required materials that were not ZTC and two syllabi (6%) did not make it clear whether the course materials were provided for free or at a cost.

We found BMCC and Brooklyn used different processes to update the ZTC attribute in CUNYfirst. Hunter was unable to provide details because it no longer has dedicated OER staff.

OLS officials are aware that CUNYfirst may not be an accurate listing of all courses using OER. However, without ensuring the accuracy of ZTC labeling, OER courses will continue to go misreported in CUNYfirst—and students may not have all the information they need when registering for courses.

We also note that CUNYfirst does not differentiate if a ZTC course was developed with OER funds, which, as discussed below, is essential to accurately calculate OER-related cost savings for students.

Computation of Student Savings

Since November 2018, CUNY has published six annual OER reports that, among other high-level information, present student cost savings data. OLS officials explained that the amount of student cost savings is calculated by multiplying the actual student enrollments in ZTC course sections from CUNYfirst by $100 (the median cost of textbooks per course). In February 2024, CUNY reported that, as of Fall 2023, 46,608 course sections had been converted, yielding an aggregate savings of $108,172,100 across 1,081,721 students.

Given the ZTC reporting errors or omissions we identified above, we question the accuracy of the calculated student cost savings because of errors or omissions affecting the numbers used in the computation. In addition, because CUNYfirst does not differentiate which ZTC courses are developed with OER funds, CUNY's calculation includes the total student enrollments from CUNYfirst for all ZTC course sections, not just those funded by the OER allocation, and thus overstates the savings. In response, CUNY officials stated that many courses with the ZTC attribute are likely to be courses that made use of the infrastructure and library of course materials that were created as a result of the OER initiative; however, they cannot confirm this assertion.

OLS officials further explained that they calculate cost savings for every dollar spent based on the total OER allocation rather than actual OER expenses. As CUNY does not track all OER spending, there is no assurance that the allocated OER funding was spent in its entirety. CUNY needs to improve its tracking of OER-funded courses and OER spending in order to have more accurate cost savings estimates.

In addition, the annual reports include the accumulated student savings, but do not provide details on each year's performance, such as the number of course sections converted and student savings. While not required to do so, reporting annual performance, in addition to aggregate results, provides relevant program performance results.

OER Academic Involvement

According to CUNY officials, professors have the academic freedom to use or not use OER materials. To determine faculties' academic involvement in the OER process, we judgmentally selected 30 professors and nine department heads from the three sampled colleges. The 30 professors teach an aggregate of 73 course sections including 31 ZTC course sections. Nineteen of the 30 professors (63%) taught both ZTC and non-ZTC sections of the same course. We interviewed seven (of nine) department heads and seven (of 30) professors who responded to our interview request. We found mixed levels of academic involvement in promoting and developing OER courses. Six (four department heads and two professors) of the 14 faculty were involved in the OER course conversion. Of the remaining eight faculty, four (one department head and three professors) said they did not want to be involved and five (two department heads and three professors) were not aware that

the State was remunerating faculty for their involvement.[2] Two of the five faculty were from Hunter.

Faculty also identified some deficiencies with the OER outreach. One Hunter department head who was not involved in OER stated that the department was not given an official directive to systematically go through the curriculum and identify courses that should be OER or use OER. A BMCC department head who was involved in OER stated that the main concern about OER is professors not knowing what OER materials and resources are available, and suggested it would be good to have regular meetings to share concerns and resources. A BMCC professor who was not involved in OER stated that the reason he was reluctant to be involved was due to copyright issues and the quality of instructional materials. He opined that many OER materials are good but not all are satisfactory.

OER adoption relies on the willingness of professors to voluntarily develop OER materials and convert course sections. Colleges identify OER representatives, usually librarians, who volunteer to perform OER-related duties in addition to their regular work. These OER representatives are responsible for obtaining OER funding for the colleges, disseminating OER information to students, and communicating with college officials and faculties who want to get involved in the OER initiative at their campuses.

OLS interacts with the colleges' OER representatives at each campus on the OER initiative and facilitates and communicates with campus OER representatives to provide support of issues relating to training and mentorship. Also, OLS officials explained they do not have the capacity to provide direct support to each individual faculty. OLS officials stated that they provide slide decks about OER and perform in-person appearances on college campuses to talk about OER and CUNY's support for it. While OLS performs outreach to encourage OER adoption, some faculty are reluctant or unaware of the OER initiative.

Recommendations

1. Establish and document an OER fund spending and reporting policy and related procedures to ensure that OER funds are spent appropriately and tracked adequately.

2. Review the approximately $10.6 million in reported expenses ($9.3 million in personal services and $1.3 million in OTPS) to ensure that the OER funds were spent for OER creation, and account for the $7.1 million in OER allocations.

3. Review the $238,094 in questionable and unsupported OER OTPS transactions and reimburse the OER allocations as appropriate.

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2   The faculty counts are not mutually exclusive. Two of the eight did not want to be involved and also were not aware of the State reimbursement.

4. Verify the accuracy of the information colleges submitted on their year-end final reports.

5. Ensure OER courses are consistently and accurately recorded in CUNYfirst.

6. Ensure that OER conversion and cost savings estimates reported to the public are accurate and complete.

7. Take steps to enhance faculty outreach to improve faculty awareness and reduce barriers to participation, and to ensure all available funds are used.

Audit Scope, Objectives, and Methodology

The objectives of our audit were to determine whether CUNY is using OER funds to establish, sustain, and enhance new and ongoing OER initiatives at its colleges to help defray textbook costs for students, and whether the OER initiatives adequately engaged faculty in the redesign of courses using OER. The audit covered the period from April 2017 through March 2024.

To accomplish our objectives and assess related internal controls, we interviewed key CUNY officials to understand CUNY's financial and operational practices and reviewed the NYS budget legislation to determine the objective of and conditions attached to the OER allocations. We examined expense reports, colleges' year-end final reports, course syllabi, invoices, meeting attendance and agendas, and contracts, and interviewed CUNY officials, faculty, and vendors.

We used a non-statistical sampling approach to provide conclusions on our audit objectives and to test internal controls and compliance. We selected judgmental and random samples. However, because we used a non-statistical sampling approach for our tests, we cannot project the results to the respective populations, even for random samples. Our samples, which are discussed in detail in the body of our report, include random and judgmental samples. We first selected a judgmental sample of three of the 22 colleges that received OER allocations to determine the OER process and to verify the salaries, stipends, and OTPS payment procedures. We selected the colleges based on the OER expenses reported and the number of students enrolled. We then selected the following samples at these three colleges:

- To test whether professors received payments for their OER work, we selected a random sample of 29 ZTC course sections from a population of 5,761 ZTC course sections from Summer 2017 through Spring 2023 semesters at the three sampled colleges—10 course sections each from Hunter and Brooklyn and nine course sections from BMCC.

- To test whether CUNYFirst course listings are accurate, we used the random sample of 29 ZTC course sections described above and a second judgmental sample of 31 Fall 2023 English, Mathematics, and Music course sections from a population of 208 ZTC course sections at the three sampled colleges to determine whether the syllabi correctly reflected the course status in CUNYfirst. For the second sample, we considered the disciplines that had the highest number of ZTC course sections in Fall 2023.

- To assess OER academic involvement, we selected one judgmental sample of 30 professors from a population of 890 professors who taught course sections, including both ZTC and non-ZTC sections of the same course, from three disciplines (English, Math, and Music) that had the highest numbers of ZTC course sections offered in Fall 2023 at the three sampled colleges.

- We selected a judgmental sample of $677,131 from $2,337,382 in OTPS expenses claimed by two of the sampled colleges and OLS during the 6 fiscal years ended June 30, 2023, based on the expense categories, amounts, vendors, or employees.

We obtained data from CUNYfirst and assessed the reliability of that data by reviewing existing information, interviewing officials knowledgeable about the system, performing electronic testing, and tracing to and from source data. We determined that the data from this system was sufficiently reliable for this report.

Statutory Requirements

Authority

The audit was performed pursuant to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

We conducted our performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State. For CUNY, these include approving selected contracts and processing payroll for certain positions. These duties may be considered management functions for purposes of evaluating organizational independence under generally accepted government auditing standards. In our professional judgment, these duties do not affect our ability to conduct this independent audit of CUNY's oversight and administration of OER.

Reporting Requirements

We provided a draft copy of this report to CUNY officials for their review and formal written comments. Their comments were considered in preparing this final report and are attached in their entirety at the end of it. In their response, CUNY officials agreed with some of our recommendations and disagreed with others, indicating actions they will take to address them. Our responses to certain CUNY comments are embedded within CUNY's response as State Comptroller's Comments.

Within 180 days after final release of this report, we request that the Chancellor of the City University of New York report to the State Comptroller, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons why.

**Executive Vice Chancellor
and University Provost**

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January 15, 2025

Mr. Kenrick Sifontes
Audit Director
Office of the New York State Comptroller
Division of State Government Accountability
59 Maiden Lane
New York, NY 10038

Re: Response to Draft OSC Audit Report on Open Educational Resources 2023-N-4

Dear Mr. Sifontes,

This letter is in response to the NYS Office of the State Comptroller's (OSC) draft report referenced above, which assesses whether The City University of New York's ("CUNY") Open Educational Resources ("OER") Initiative has used its funds to establish, sustain, and enhance new and ongoing OER initiatives at its colleges to help defray textbook costs for students, and whether the OER initiatives adequately engaged faculty in the redesign of courses using OER from the period of April 2017 to March 2024. CUNY appreciates the opportunity to respond to the draft report.

As a preliminary comment, we wish to assert that CUNY continues to take very seriously the OER program and the immense benefits and positive outcomes our students and faculty derive from it. CUNY has been successful at engaging every undergraduate serving college in this effort with successful growth from year to year. It is undeniable that CUNY has saved students millions of dollars by incentivizing faculty at the university to use zero cost and openly licensed learning materials. It has been proven through many studies nationwide that reducing the cost of learning materials has positive effects on students' academic success and on their overall financial stability. It is also undeniable that CUNY's OER program is nationally and internationally respected. Faculty and staff affiliated with CUNY's OER program have published over 70 peer reviewed articles on OER, represented CUNY at innumerable national and international OER conferences, been members of national and international OER organizations, and won several national and international awards for their work. While CUNY is thankful for the work that OSC has done to highlight areas where the OER program could be more efficient and more transparent in its activities, we feel it necessary to point out that the OER program is a success by many internal and external metrics.

Further, CUNY would like to highlight four specific points of clarification and disagreement with the draft report:

1. **ZTC vs. OER**: Throughout the course of the audit, CUNY has been clear that our understanding of the mandate from New York State ("NYS") was to lower the cost of course materials for students. In order to fulfill that mandate, we funded both the use and creation of OER *and* the use of zero cost materials. OSC occasionally makes a clear separation between these two things and rejects CUNY's stance that the conversion of courses to zero textbook cost should be eligible for compensation. It is CUNY's argument that due to the relative lack of OER in some disciplines and in upper level courses, our following OSC's interpretation would have saved students far less money, effectively forcing CUNY students to spend more money on their college education. This especially applies to findings in the report about OTPS items that were paid for with NYS funding that OSC deemed "not OER related." These items were paid for with NYS funds to create more opportunity for faculty to assign students materials at no cost to the students. These materials do not need to be openly licensed in order to do that.

   State Comptroller's Comment – According to the NYS Budget legislation, OER funding "shall be made available for services and expenses of expanding open educational resources." The use of the NYS funds should be related to this expressed purpose. For example, as stated on page 12 of our report, CUNY spent $24,160 in OER funds to purchase subscriptions to video, photo, and print materials at no cost to students. However, these materials do not fit CUNY's own description of OER.

2. **What constitutes acceptable evidence**: Throughout the report, OSC states that CUNY did not provide support or evidence for OER spending. CUNY would like to point out that it offered numerous forms of hard copy evidence of spending that OSC rejected because these forms of evidence were not direct outputs from CUNYfirst. Although OSC acknowledges that their audit identified "technological limitations" they continue to interchange CUNY's ERP system's functionality with the state/city payroll system's functionality. This is evidenced by OSC's statement, "Furthermore, according to CUNY payroll officials, they do not document the reasons for compensation and the codes used to process OER payments are not unique to OER payments." CUNY gave OSC multiple walkthroughs of the payroll systems to observe stipend input and processing parameters of these systems. OSC would only accept reports from the non-CUNY payroll system and CUNYfirst as acceptable evidence. Due to system limitations this was not always feasible.

   State Comptroller's Comment – CUNY could not provide supporting details on approximately $10.6 million in reported expenses including basic information such as who received the payment, when the payment was made, and what the payment was for (e.g., which course was converted to OER), regardless of the system. Furthermore, we explicitly asked for this information. The evidence that was provided from outside of CUNYfirst and the payroll system lacked sufficient relevant information to support how OER funds were used.

3. **ZTC Cost savings**: CUNY disagrees with OSC's methodology for the calculation of student savings which seems to be based on a methodology that considers the savings for one course offered one time and does not consider the reality that many, if not most, courses have multiple sections per semester and are offered repeatedly over a number of years resulting in compound savings. Further, it does not consider that the infrastructure and library of course materials that CUNY faculty, staff, and students have built enables faculty members to create and reteach ZTC courses without any additional expense.

   State Comptroller's Comment – CUNY is mistaken. There is no OSC methodology for calculating student cost savings; rather, we relied on CUNY's methodology. Moreover, we identified several weaknesses in CUNY's student cost savings reporting, such as not reporting cost savings by year—which can make analyzing yearly performance of CUNY's OER program difficult.

4. **CUNY OLS vs. College -** Much of OSC's findings and recommendations rest on a desire for CUNY's Central Office, where the Office of Library Services (OLS) is located, to have direct control over the activities of the campuses. Although the Central Office has many powers, total control over campus day-to-day decision making and processes is not within the by-laws of the University. The OER program, specifically, is administered in a way that reflects this reality.

   State Comptroller's Comment – Our report does not suggest that Central Office have direct control over the activities on the campuses—we are not saying who is or should be responsible. Our findings and recommendations are addressed to CUNY, as one entity, to ensure the OER program is operating effectively. CUNY's conversation about roles and responsibility does not address our findings.

   Largely missing from OSC's report is the role of the campus OER representative and how they are empowered to make decisions in collaboration with OLS. The OER representative requests the funds through a detailed RFP process. Once the funds are received by the College, the OER representative utilizes these funds to educate, inform, and support faculty interested in conversion. They are the extension of OLS, i.e, the boots on the ground. OER Representatives also create a very detailed year- end report highlighting how the funds were used, what courses were converted, systems implemented, achievements and best practices. These 90+ reports were provided to OSC and further substantiated many of the claims OSC stated could not be supported. The lack of acknowledgement of this key control by OSC is a disadvantage to the reader.

   State Comptroller's Comment – CUNY is being disingenuous to suggest that we do not acknowledge CUNY's year-end OER reports. In fact, on pages 13 and 14 of our report, we explicitly address the findings related to these reports. OSC reviewed these year-end reports and found they lacked critical information such as course section details and professor names, which are all needed to properly identify which courses were converted. CUNY could also not support they reviewed these reports themselves. Furthermore, the 90+ reports and other documentation were insufficient to support CUNY's expenditure of OER funds in compliance with the NYS Budget legislation.

The following seven recommendations were issued by OSC. CUNY has provided responses to each of the recommendations below:

1. **Establish and document an OER fund spending and reporting policy and related procedures to ensure that OER funds are spent appropriately and tracked adequately.**
    a. CUNY agrees with the recommendation to establish a policy around OER fund spending and reporting. Central Office, Office of Library Services (OLS) identifies and tracks its own expenditures and ensures that the OER budget is fully allocated to the colleges and OLS every year. It is the responsibility of the colleges to track their own expenditures, using the OER funding code. What OLS came to understand through this audit is that expenditure-level tracking at the colleges was inadequate. CUNY has already taken steps to correct that at the colleges. CUNY's Office of Budget and Finance issued a memo on March 4, 2024, on recording academic program expenses: "Colleges are required to use this coding when expending the funds and must adjust financial management practices where needed…."

2. **Review the approximately $10.6 in reported expenses ($9.3 million in personal services and $1.3 million in OTPS) to ensure that the OER funds were spent for OER creation, and account for the $7.1 million in OER allocations.**
    a. CUNY is confident that funds were used for OER and Zero Textbook Cost purposes, and we provided records to OSC that we felt appropriately documented these expenses. However, going forward CUNY will do the following:
        i. Require the budget office at each college to sign off on expense reports created by campus OER representatives.
        ii. CUNY will not continue to fund a campus's OER program until these budget office approved expense reports are provided.

    State Comptroller's Comment – It is unclear what underpins CUNY's confidence that these amounts were used appropriately as no detailed information was provided. CUNY did not track approximately $17.7 million in OER funds, including $10.6 million in reported spending and $7.1 million in OER allocations.

3. **Review the $238,094 in questionable and unsupported OER OTPS transactions and reimburse the OER allocations as appropriate**
    a. CUNY does not agree that these expenses were questionable.

    State Comptroller's Comment – We stand by our findings. As detailed on page 12 of our report, CUNY used OER funds for expenses that were not exclusively OER. For example, CUNY spent $9,897 to purchase computers for a unit within its library that catalogs CUNY's library materials. The entire amount was allocated to OER even though the computers were not used exclusively for cataloging OER materials.

4. **Verify the accuracy of the information colleges submitted on their year-end final reports.**
   a. As noted above in Recommendation #2, CUNY will require campus budget offices to review and verify expense reports prepared by campus OER representatives. In addition, CUNY will take steps to ensure that courses are properly labeled ZTC.

5. **Ensure OER courses are consistently and accurately recorded in CUNYfirst.**
   a. CUNY will take the following steps to meet this recommendation:
      i. CUNY will require that faculty members who are compensated to convert their courses to Zero Textbook Cost sign a Letter of Intent where they agree to report their course to the appropriate parties on their campus as Zero Textbook Cost. Failure to do so will prevent faculty members from receiving compensation.
      ii. CUNY will work with campus OER representatives to establish a workflow for them to verify accurately ZTC course marking in CUNYFirst at the campus level.

6. **Ensure that OER conversion and cost savings estimates reported to the public are accurate and complete.**
   a. As noted in the points of disagreement, CUNY does not agree with OSC's methodology for the calculation of student savings by the OER program. However, in future reporting CUNY will include figures that indicate the savings that the OER program has directly paid for.

   State Comptroller's Comment – CUNY is mistaken. There is no OSC methodology for calculating student cost savings; rather, we relied on CUNY's methodology. Moreover, we identified several weaknesses in CUNY's student cost savings reporting, such as not reporting cost savings by year—which can make analyzing yearly performance of CUNY's OER program difficult.

7. **Take steps to enhance faculty outreach to improve faculty awareness and reduce barriers to participation, and to ensure all available funds are used.**
   a. Outreach is generally handled at the campus level, however, CUNY will commit to producing more university-wide outreach materials.

Thank you again for the opportunity to respond to this audit report. We agree that there are improvements CUNY can implement to make the OER Initiative more efficient and transparent and are prepared to do so. Please contact me if you need any additional information.

Respectfully,

Alicia M. Alvero
Interim Executive Vice Chancellor and University Provost
City University of New York

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