



## AAQEP Annual Report for 2024

Provider/Program Name:	New York City College of Technology of the City University of New York, Education Programs
End Date of Current AAQEP Accreditation Term (or “n/a” if not yet accredited):	June 30, 2030

### PART I: Publicly Available Program Performance and Candidate Achievement Data

#### 1. Overview and Context

This overview describes the mission and context of the educator preparation provider and the programs included in its AAQEP review.

New York City College of Technology (NYCCT or City Tech) is a senior college in the City University of New York (CUNY), which is comprised of 25 campuses. CUNY is the third-largest university system in the United States in terms of enrollment. City Tech is an urban, commuter, public institution, serving a diverse student body. The college’s mission statement and the mission of our educational programs follows:

*New York City College of Technology is a baccalaureate and associate degree-granting institution committed to providing broad access to high quality technological and professional education for a diverse urban population. City Tech’s distinctive emphasis on applied skills and place-based learning built upon a vibrant general education foundation equips students with both problem-solving*

*skills and an understanding of the social contexts of technology that make its graduates competitive. A multi-disciplinary approach and creative collaboration are hallmarks of the academic programs. As a community City Tech nurtures an atmosphere of inclusion, respect, and open-mindedness in which all members can flourish.*

[The Career and Technical Teacher Education Program](#) leads to a Bachelor of Science in Career and Technical Teacher Education, which fulfills the academic requirements of the Initial and Professional teaching certificates in Career and Technical Education. Graduates of the Career and Technical Teacher Education program are employed in a variety of settings including CTE programs in public high schools, private trade schools, Boards of Cooperative Education Services (BOCES), and industrial training programs. The Technology Education programs are: Initial Certificate program leading to a [Bachelor of Science in Education in Technology Education degree](#) and the [Transitional C Alternative Teacher Preparation Program](#). These programs are housed in the Career and Technology Teacher Education department, one of the academic department within the School of Professional Studies.

The [Mathematics Education Program](#) is administered by the Mathematics Department, in the School of Arts and Sciences, and leads to a Bachelor of Science in Mathematics Education. It was founded in 2012, when the program was formally approved by New York State. The program offers rigorous mathematics content and pedagogical preparation. All mathematics content and mathematics education courses are specifically designed for the students majoring in mathematics education. The program graduates become mathematics teachers, coaches, and team leaders in Brooklyn schools and schools and learning centers around NYC.

### **Public Posting URL**

Part I of this report is posted at the following web address (accredited members filing this report must post at least Part I):

<https://www.citytech.cuny.edu/teacher-education/accreditation.aspx>,  
<https://www.citytech.cuny.edu/mathematics/mathematics-education-bs.aspx>, and  
<https://www.citytech.cuny.edu/teacher-education/>

## 2. Enrollment and Completion Data

Table 1 shows current enrollment and recent completion data for each program included in the AAQEP review.

**Table 1. Program Specification: Enrollment and Completers for Academic Year 2023-2024**

Degree or Certificate granted by the institution or organization	State Certificate, License, Endorsement, or Other Credential	Number of Candidates enrolled in most recently completed academic year (12 months ending 06/24)	Number of Completers in most recently completed academic year (12 months ending 06/24)
<b><i>Programs that lead to initial teaching credentials</i></b>			
1. Bachelor of Science in Education	1. Initial Certification: Technology Education	27	4
2. Bachelor of Science in Education	2. Initial Certification and/or Professional Certification: Career and Technical Teacher Education	50	5
3. Bachelor of Science	3. Initial Certification: Mathematics (Grades 7-12)	16	3
4. Transitional C Certificate in Technology Education	4. Transitional C Certification	1	1
Total for programs that lead to initial credentials		95	13
<b><i>Programs that lead to additional or advanced credentials for already-licensed educators</i></b>			
Total for programs that lead to additional/advanced credentials			
<b><i>Programs that lead to credentials for other school professionals or to no specific credential</i></b>			
Total for additional programs			

TOTAL enrollment and productivity for all programs	95	13
Unduplicated total of all program candidates and completers		

**Added or Discontinued Programs**

Any programs within the AAQEP review that have been added or discontinued within the past year are listed below. (This list is required only from providers with accredited programs.)

N/A

**3. Program Performance Indicators**

The program performance information in Table 2 applies to the academic year indicated in Table 1.

**Table 2. Program Performance Indicators**

A. <b>Total enrollment</b> in the educator preparation programs shown in Table 1. This figure is an unduplicated count, i.e., individuals earning more than one credential may be counted in more than one line above but only once here.
95
B. <b>Total number of unique completers</b> (across all programs) included in Table 1. This figure is an unduplicated count, i.e., individuals who earned more than one credential may be counted in more than one line above but only once here.
13
C. <b>Number of recommendations</b> for certificate, license, or endorsement included in Table 1.
6
D. <b>Cohort completion rates</b> for candidates who completed the various programs within their respective program’s expected timeframe <b>and</b> in 1.5 times the expected timeframe.
The Initial Cohort is full-time-first-time freshmen for that fall term. Graduation rate data was mined from our Assessment and Institutional Research and Evaluation (AIRE) Data Dashboard ( <a href="https://www.citytech.cuny.edu/aire/graduation-rates-bac.aspx">https://www.citytech.cuny.edu/aire/graduation-rates-bac.aspx</a> ).

The majority of CTTE program students are transfer students, part-time, transitional students, or participants in Success Via Apprenticeship (SVA), a 5-year program, which includes 2 years of mentored teaching and 3 years of industrial experience, concurrent with 5 years of college courses. Consequently, the time to graduation of our CTTE program students is prolonged, although it is possible to graduate in 4 years, which we used as the expected time. Additionally, the graduation rates of CTE program students do not reflect their program completion, as they obtain an initial teaching certificate before graduation and a BSEd degree is only required for a professional certificate. Some students transfer to other colleges or programs, as well.

<b>Technology Education Program</b>					
Fall Term	Initial Cohort	# Completers (4 yrs, 100% of time)	% Graduated (4 yrs, 100% of time)	# Completers (6 yrs, 150% of time)	% Graduated (6 yrs, 150% of time)
2015	4	2	50%	2	50%
2016	0	NA	NA	NA	NA
2017	4	0	0%	0	0%
2018	0	NA	NA		
2019	2	0	0%		

<b>Career and Technical Education Program</b>					
Fall Term	Initial Cohort	# Completers (4 yrs, 100% of time)	% Graduated (4 yrs, 100% of time)	# Completers (6 yrs, 150% of time)	% Graduated (6 yrs, 150% of time)
2015	3	0	0%	0	0%
2016	0	NA	NA	NA	NA
2017	2	0	0%	0	0%
2018	6	1	16.7%		
2019	1	0	0%		

The expected timeline for the Mathematics Education Program is four years for full-time students. However, many students work and study part-time, which may extend the time required to complete the program. Some students transfer to other colleges or programs. Additionally, some students may transfer into the program with previously completed coursework, which can also affect their time to graduation.

**Mathematics Education Program**

Fall Term	Initial Cohort	# Completers (4 yrs, 100% of time)	% Graduated (4 yrs, 100% of time)	# Completers (6 yrs, 150% of time)	% Graduated (6 yrs, 150% of time)
2015	1	0	0%	0	0%
2016	2	0	0%	0	0%
2017	0	NA	NA	NA	NA
2018	0	NA	NA		
2019	0	NA	NA		

**E. Summary of state license examination results**, including teacher performance assessments, and specification of any examinations on which the pass rate (cumulative at time of reporting) was below 80%.

Test Field	Attempt	Pass (Rate)	Fail (Rate)
EAS	18	13 (72%)	5 (18%)
CST Technology	4	2 (50%)	2 (50%)
CST Mathematics	6	1(17%)	5 (83%)

Most of the students who failed the CST and EAS exams in AY 23-24 are currently attending workshops offered by City Tech to help them better prepare for the exams.

**F. Narrative explanation of evidence available from program completers**, with a characterization of findings.

A total of 4 program completers responded to the CTTE graduate survey. The scale was 5-very satisfied, 4-Somewhat satisfied, 3-Neither satisfied nor dissatisfied, 2-Somewhat dissatisfied, and 1-Very dissatisfied. The overall average score of the respondents was 4.5/5, and most items surveyed as very satisfied or somewhat satisfied. Feedback on the program included that the professors were easy to access, and that cultural diversity was taught in the classes. As for improvements, there were opinions that the teaching materials need to be individualized according to the learner and that more guidance is needed regarding teacher qualifications. In the 2023-24 academic year, 13 students completed student teaching, and their performance was assessed using CCAST. CCAST consists of 5 domains and 14 items and the score were recorded as 3-Exceeds Expectations, 2-Meets Expectations, 1-Emerging, and 0-Does Not Meet Expectations. The average scores were 2.83/3. In most areas, students received 3-Exceeds Expectations and 2-Meets Expectations averaging above 2.8, but Connections to Research and Theory was the lowest average score, 2.43.

The survey of the Mathematics Education program completers in AY 2023-2024 indicate that students were “highly satisfied” (rated 4) or “satisfied” (rated 3) with the teacher preparation program and the knowledge and skills they have acquired in relation to all areas including content, pedagogy, learning theories, culturally responsive strategies. The scale used is 4-“very satisfied,” 3-“satisfied,” 2-“dissatisfied,” and 1-“very dissatisfied.” According to the comments, a strength of the program is that students had a chance to do extensive field experiences before they started student teaching. That gave them an idea of what to expect as student teachers and in-service teachers. Completers also acknowledged the responsiveness and the support of the mathematics education faculty throughout their journey, and the many opportunities for scholarships (e.g., Noyce), internships (e.g., TEU) and others that allowed them to grow. A suggestion was made that instructors could be more flexible with student assignments, particularly in the EDU and MEDU courses, by offering more alternatives for students to complete and submit their work.

**G. Narrative explanation of evidence available from employers of program completers, with a characterization of findings.**

Three employers of CTTE responded to the employer survey. The employer service was structured on a four-point Likert scale: 4-very satisfied, 3-satisfied, 2-dissatisfied, and 1-very dissatisfied. The average score of the total 18 items was 2.8/4. The responses indicated that most items, such as Demonstrating content, pedagogical, and professional knowledge, Planning and delivering developmentally appropriate lessons, were generally satisfied, but the item Using varied instructional approaches, was found to be dissatisfied. Based on these results, we found that there is a need for emphasizing developmentally appropriate lesson planning and implementation.

According to the responses of employers of Math Education program alumni, 90% of the school principals, who completed the survey, state that the program graduates they hired are “highly effective teachers” (rated 4) and “effective teachers” (rated 3) in regard to the following: 1. content, pedagogical, and professional knowledge, 2. planning and delivering developmentally appropriate lessons, 3. use varied instructional approaches, and 4. integration of technology in their teaching. The scale used is 4-“highly effective,” 3-“effective,” 2- “somewhat effective,” and 1-“not effective.” Employers also shared that our program completers are compassionate, dedicated, and organized. However, they identified several areas for improvement, including strengthening strategies and practices for working with students with special needs; enhancing support for students' growth in international and global perspectives; fostering stronger partnerships with families in the learning process; and increasing involvement with local communities.

H. Narrative explanation of how the program investigates **employment rates for program completers**, with a characterization of findings. This section may also indicate rates of completers' ongoing education, e.g., graduate study.

In the 2023-24 academic year, 10 students completed CTTE programs, and eight students were successfully hired as full-time teachers at New York State public schools. One student was hired as a part-time teacher and secured the position after passing the certificate exam in November 2024.

Of the three completers of the Mathematics Education program in AY 23-24, one is employed full-time in a public school. The second completer reported that she is taking a gap year, but is planning to pursue a teaching job. The third completer is currently employed in a non-education field.

License Area	Completers	Total Certified	Total Employed	Seeking Teaching Position	Continuing formal education	% placement in teaching
CTE	6	4	6		0	100%
Technology Education	4	2	3	1	0	75%
Transitional C Technology Education	1	1	1			100%
Mathematics Education	3	0	1	1	0	33%

#### 4. Candidate Academic Performance Indicators

Tables 3 and 4 report on select measures of candidate/completer performance related to AAQEP Standards 1 and 2, including the program's expectations for successful performance and indicators of the degree to which those expectations are met.



**Table 3. Expectations and Performance on Standard 1: Candidate and Completer Performance**

Provider-Selected Measures	Explanation of Performance Expectation	Level or Extent of Success in Meeting the Expectation						
<p><b>Pre-CPAST</b></p> <p>Definition of success: The performance levels set by the rubric are: (0 points) – “does not meet expectations”; (1 point) - “emerging,” (2 points) - meets expectations.”</p> <p>The program goals in relation to the Pre-CPAST are for all teacher candidates to score at emerging (1) or above levels in at least ten categories, and “does not meet expectations” on at most 4 categories of the rubric of this assessment. Our hope is to see positive growth in these areas by the teacher candidates upon comparison of their scores on the rubric in the methods courses, on microteaching and later in student teaching. These performance expectations have been met.</p>		<b>Technology Education &amp; CTE Programs Pre-CPAST (excerpts)</b>						
				<b>Fall 2023 EDU 3682</b>		<b>Spring 2024 EDU 3682</b>		
			<b>N, students</b>	<b>Score (mean, range)</b>	<b>N, students</b>	<b>Score (mean, range)</b>		
		<b>Planning for Instruction and Assessment</b>						
		A. Planning for Learning: Standards and Objective/Targets	3	1.7 (1-2)	3	2 (2-2)		
		B. Assessment of P-12 Learning (Planned assessments)	3	2 (2-2)	3	2 (2-2)		
		E. Digital Tools and Resources	3	2 (2-2)	3	2 (2-2)		
		<b>Professional Dispositions</b>						
		K. Demonstrates punctuality	3	2 (2-2)	3	2 (2-2)		
		L. Meets deadlines and obligations	3	2 (2-2)	3	2 (2-2)		
		M. Collaboration	3	2 (2-2)	2	2 (2-2)		
		N. Responds positively to feedback	3	2 (2-2)	3	2 (2-2)		

		<b>Mathematics Education Program Pre-CPAST (excerpts)</b>				
		<b>Fall 2023 MEDU 3001</b>		<b>Spring 2024 MEDU 3002</b>		
		<b>N, students</b>	<b>Score (mean, range)</b>	<b>N, students</b>	<b>Score (mean, range)</b>	
		<b>Planning for Instruction and Assessment</b>				
		A. Planning for Learning: Standards and Objective/Targets	6 2 (1-2)	3 2 (1-2)	2 (1-2)	
		B. Assessment of P-12 Learning (Planned assessments)	6 1.2 (1 - 2)	3 1.3 (1-2)	1.3 (1-2)	
		E. Digital Tools and Resources	6 1.6 (1-2)	3 2 (1-2)	2 (1-2)	
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		N. Responds positively to feedback	6 1.8 (1-2)	3 2 (2-2)	2 (2-2)	
<b>CPAST</b>	Definition of Success: The performance levels set by the rubric are: (0 points) Does not meet expectations, (1 point) Emerging; (2 points) Meets expectations; (3 points) Exceeds expectations.	<b>Technology and CTE Education Programs CPAST (excerpts)</b>				
		<b>Fall 2023 EDU 4872</b>		<b>Spring 2024 EDU 4872</b>		
		<b>N, students</b>	<b>Score (st.dev.)</b>	<b>N, students</b>	<b>Score (mean, range)</b>	
		<b>Instructional Delivery</b>				

<p>The Program goals in relation to the CPAST are that all teacher candidates score at the “meets expectations” (2) level or above on at least 13 categories and at the “emerging” (1) level on at most 8 categories (with no categories scored at the “does not meet expectations” (0) level). We expect to see growth among the teacher candidates in all the dimensions captured by the CPAST: Planning for Instruction and Assessment; Instructional Delivery; Assessment; Analysis of Teaching; Professional Commitment and Behaviors; Professional Relationships; Critical Thinking and Reflective Practice.</p> <p>The performance expectations have been met.</p>	<table border="1"> <tr> <td>A. Planning for Learning: Standards and Objective/Targets</td> <td>9</td> <td>2.9 (.32)</td> <td>4</td> <td>2.8 (.45)</td> </tr> <tr> <td>B. Assessment of P-12 Learning (Planned assessments)</td> <td>9</td> <td>3.0 (0)</td> <td>4</td> <td>2.8 (.45)</td> </tr> <tr> <td>H. Digital Tools and Resources</td> <td>9</td> <td>2.9 (.32)</td> <td>4</td> <td>2.6 (.55)</td> </tr> <tr> <td>J. Data guided instruction</td> <td>9</td> <td>2.8 (.43)</td> <td>4</td> <td>2.6 (.55)</td> </tr> <tr> <td>L. Assessment techniques</td> <td>9</td> <td>2.7 (.46)</td> <td>4</td> <td>(2.6) (.55)</td> </tr> <tr> <td colspan="5" style="text-align: center;"><b>Professional Dispositions</b></td> </tr> <tr> <td>U. Responds to feedback</td> <td>9</td> <td>3.0 (0)</td> <td>4</td> <td>3.0 (0)</td> </tr> </table>	A. Planning for Learning: Standards and Objective/Targets	9	2.9 (.32)	4	2.8 (.45)	B. Assessment of P-12 Learning (Planned assessments)	9	3.0 (0)	4	2.8 (.45)	H. Digital Tools and Resources	9	2.9 (.32)	4	2.6 (.55)	J. Data guided instruction	9	2.8 (.43)	4	2.6 (.55)	L. Assessment techniques	9	2.7 (.46)	4	(2.6) (.55)	<b>Professional Dispositions</b>					U. Responds to feedback	9	3.0 (0)	4	3.0 (0)
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Teacher Candidate Work Sample (TPA)	<p>The Teacher Performance Assessment (TPA) measures teacher candidates' professional growth by engaging them in designing sequential lessons based on content, theory, research, and student knowledge. TPA consists of 5 tasks, and student performance is assessed using a 4-level Likert scale with 3-Exceeds Expectations, 2-Meets Expectations, 1-Emerging, and 0-Does Not Meet Expectations. The desired outcome is level 2 -Meets Expectations or above on each rubric.</p> <p>The AY 23-24 data indicates that performance met the expectation.</p>	<table border="1"> <thead> <tr> <th colspan="5">Technology and CTE Education Programs Teacher Performance Assessment</th> </tr> <tr> <th></th> <th colspan="2">Fall 2023 EDU 4872</th> <th colspan="2">Spring 2024 EDU 4872</th> </tr> <tr> <th></th> <th>N, students</th> <th>Score (stdev)</th> <th>N, students</th> <th>Score (mean, range)</th> </tr> </thead> <tbody> <tr> <td>1. Knowledge of context and students</td> <td>9</td> <td>2.6 (.5)</td> <td>4</td> <td>3.0 (0)</td> </tr> <tr> <td>2. Instructional planning</td> <td>9</td> <td>2.9 (.24)</td> <td>4</td> <td>2.9 (.35)</td> </tr> <tr> <td>3. Culturally responsive teaching</td> <td>9</td> <td>2.8 (.42)</td> <td>4</td> <td>2.75 (.45)</td> </tr> <tr> <td>4. Assessment of student learning</td> <td>9</td> <td>2.4 (.5)</td> <td>4</td> <td>2.25 (.71)</td> </tr> <tr> <td>5. Professional responsibilities and growth</td> <td>9</td> <td>2.2 (.38)</td> <td>4</td> <td>2.75 (.46)</td> </tr> </tbody> </table>	Technology and CTE Education Programs Teacher Performance Assessment						Fall 2023 EDU 4872		Spring 2024 EDU 4872			N, students	Score (stdev)	N, students	Score (mean, range)	1. Knowledge of context and students	9	2.6 (.5)	4	3.0 (0)	2. Instructional planning	9	2.9 (.24)	4	2.9 (.35)	3. Culturally responsive teaching	9	2.8 (.42)	4	2.75 (.45)	4. Assessment of student learning	9	2.4 (.5)	4	2.25 (.71)	5. Professional responsibilities and growth	9	2.2 (.38)	4	2.75 (.46)
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**Table 4. Expectations and Performance on Standard 2: Completer Professional Competence and Growth**

Provider-Selected Measures	Explanation of Performance Expectation	Level or Extent of Success in Meeting the Expectation				
<p><b>CPAST</b></p> <p>Definition of Success: The performance levels set by the rubric are: (0 points) Does not meet expectations, (1 point) Emerging; (2 points) Meets expectations; (3 points) Exceeds expectations.</p> <p>The Program goals in relation to the CPAST are that all teacher candidates score at the “meets expectations” (2) level or above on at least 13 categories and at the “emerging” (1) level on at most 8 categories (with no categories scored at the “does not meet expectations” (0) level). We expect to see growth among the teacher candidates in all the dimensions captured by the CPAST: Planning for Instruction and Assessment; Instructional Delivery; Assessment; Analysis of Teaching; Professional Commitment and Behaviors; Professional Relationships;</p>		<b>Technology and CTE Education Programs CPAST (excerpts)</b>				
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		C. Assessment of P-12 learning	9	2.9 (.24)	4	2.8 (.45)
		D. Differentiated methods	9	2.8 (.43)	4	2.8 (.45)
		F. Critical Thinking	9	2.8 (.38)	4	3.0 (0)
		I. Safe and respectful learning environment	9	2.9 (.32)	4	3.0 (0)
		<b>Mathematics Education Program CPAST (excerpts)</b>				
		<b>Spring 2024 MEDU 4001/4002</b>			<b>N, students</b>	<b>Score (mean, range)</b>
		<b>Instructional Delivery</b>				
		C. Assessment of P-12 learning	3	1.7 (1-2)		

	<p>Critical Thinking and Reflective Practice. The performance expectations have been met.</p>	<table border="1"> <tr> <td data-bbox="793 180 1459 253">D. Differentiated methods</td> <td data-bbox="1459 180 1604 253">3</td> <td data-bbox="1604 180 1871 253">1.7 (1-2)</td> </tr> <tr> <td data-bbox="793 253 1459 326">F. Critical Thinking</td> <td data-bbox="1459 253 1604 326">3</td> <td data-bbox="1604 253 1871 326">1.7 (1-2)</td> </tr> <tr> <td data-bbox="793 326 1459 399">I. Safe and respectful learning environment</td> <td data-bbox="1459 326 1604 399">3</td> <td data-bbox="1604 326 1871 399">2.0 (1-3)</td> </tr> <tr> <td colspan="3" data-bbox="793 399 1871 431"><b>Professional Dispositions</b></td> </tr> <tr> <td data-bbox="793 431 1459 496">S. Collaboration</td> <td data-bbox="1459 431 1604 496">3</td> <td data-bbox="1604 431 1871 496">2.7 (2-3)</td> </tr> </table>	D. Differentiated methods	3	1.7 (1-2)	F. Critical Thinking	3	1.7 (1-2)	I. Safe and respectful learning environment	3	2.0 (1-3)	<b>Professional Dispositions</b>			S. Collaboration	3	2.7 (2-3)												
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Employer Survey	<p>This survey is distributed to employers—typically school principals. The survey consists of 17 items and is constructed as a 4-point Likert scale with Very Effective, Effective, Somewhat Effective, and Not Effective. Additionally, we asked about their willingness to hire our graduates. The desired outcome is that all employers have the perception that our program graduates are “Very Effective” or “Effective” The data indicates that one employer responded “very effective” while the other two were “somewhat effective” in most of questions.</p>	<table border="1"> <thead> <tr> <th colspan="3">Technology and CTE Employers’ Survey (excerpts)</th> </tr> <tr> <th>Survey item</th> <th># Employers’ responses</th> <th>% of Employers’ responses “Very Effective” or “Effective”.</th> </tr> </thead> <tbody> <tr> <td colspan="3">How effective has this teacher been in addressing each of the following areas?</td> </tr> <tr> <td>Demonstrating content, pedagogical, and professional knowledge.</td> <td>3</td> <td>66%</td> </tr> <tr> <td>Planning and delivering developmentally appropriate lessons.</td> <td>3</td> <td>33%</td> </tr> <tr> <td>Using varied instructional approaches.</td> <td>3</td> <td>33%</td> </tr> <tr> <td>Demonstrating knowledge of learners and learning theory.</td> <td>3</td> <td>33%</td> </tr> <tr> <td>Using varied formal and informal methods to assess learning, monitor learner progress, and inform instruction.</td> <td>3</td> <td>33%</td> </tr> <tr> <td>Creating positive and productive learning environment.</td> <td>3</td> <td>33%</td> </tr> <tr> <td>Managing a classroom.</td> <td>3</td> <td>33%</td> </tr> </tbody> </table>	Technology and CTE Employers’ Survey (excerpts)			Survey item	# Employers’ responses	% of Employers’ responses “Very Effective” or “Effective”.	How effective has this teacher been in addressing each of the following areas?			Demonstrating content, pedagogical, and professional knowledge.	3	66%	Planning and delivering developmentally appropriate lessons.	3	33%	Using varied instructional approaches.	3	33%	Demonstrating knowledge of learners and learning theory.	3	33%	Using varied formal and informal methods to assess learning, monitor learner progress, and inform instruction.	3	33%	Creating positive and productive learning environment.	3	33%	Managing a classroom.	3	33%
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	The performance expectations did not meet.	
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## 5. Notes on Progress, Accomplishment, and Innovation

This section describes program accomplishments, efforts, and innovations (strengths and outcomes) to address challenges and priorities over the past year.

Some of the challenges our teacher preparation programs face include recruitment and teacher candidates' initial certification near graduation.

To address the first challenge, we secured a \$1.3 million *My Brother's Keeper Teacher Opportunity Corps (TOC) II* grant (2023-2028), funded by NYSED. This grant provides up to 50% tuition support for TOC fellows, along with professional development and peer networking opportunities. It has helped attract and recruit new and diverse teacher candidates. Currently, 39 teacher candidates are supported by the TOC grant. We also recruit students by partnering with campus programs such as ASAP, STEP, and College Now. The CTTE department established a partnership agreement with the STEP/CSTEP program and provides our teacher education students with opportunities to engage in the program as instructors and mentors of the participating students. Another step we've taken to enhance the recruitment of diverse teacher candidates is the recent submission of a curriculum proposal to create a *Liberal Arts and Sciences (LAS) Specialization in Mathematics Education*. This specialization will provide an academic focus in mathematics education for students in the associate degree program in LAS, serving as a pathway for their seamless transition into the BS in Mathematics Education program through a 2+2 structure. The CTTE program also developed articulation agreements with two CUNY community colleges. The articulation agreements will ensure a smooth transition for students transferring from community colleges within CUNY to our degree programs by ensuring maximum credit transfer. Additionally, the New York City Men Teach (NYCMT) program is a strong partner, with whom we organize recruitment events.

The second challenge pertains to teacher candidates' initial certification. Many of our candidates work while studying, and the financial pressures often lead them to delay taking certification exams until after graduation. Additionally, we need to improve state licensure exam pass rates. To address these concerns, we have partnered with the NYCMT program to actively promote certification exam preparation workshops offered on campus. NYCMT now provides periodic workshops, one-on-one exam preparation sessions,



and free exam vouchers to teacher candidates. Both NYCMT and our teacher preparation programs are actively encouraging students and graduates who have not yet obtained certification to take advantage of these resources. The Mathematics Education program is looking at its curriculum to see where CST preparation can be better embedded, as well.

Additionally, we are involved in several initiatives aimed at innovating and enhancing the teacher preparation experience. One such initiative is the university-wide *CUNY Computer Science Integration in Teacher Education (CITE)* program, a four-year project to integrate computing content and pedagogy into required education courses, fieldwork, and student teaching, aligning them with NYS computer science standards. Another initiative we have introduced for teacher candidates supported by the TOC II grant is the opportunity to participate in a teaching residency. This program allows candidates to gain extended teaching experience while being mentored by an expert teacher.

Furthermore, the CTTE Department has proposed significant curriculum modifications for the Spring 2024 semester to ensure the successful implementation of the new *Teacher Performance Assessment (TPA)*, which was approved in Fall 2024. This proposal includes increasing the hours for the *EDU 4601 Professional Development Seminar* from 1 to 3 hours and replacing the required *Principles of Science* classes for CTTE students with *Life and Physical Sciences (LPS)* and *Scientific World (SW)* courses as part of General Education. These changes provide students with more flexibility in their course choices and enhance compatibility for transfer students who have already completed the LPS and SW courses.

The Mathematics Education program already allows students to take the courses needed to apply for secondary computer science certification once they are in-service teachers. They are looking into adding an option for physics certification as well. Our Advisory Board has indicated that multiple certifications enhance employment opportunities.

