MASSACHUSETTS DEPARTMENT OF
ELEMENTARY AND SECONDARY
EDUCATION

Renewal Inspection Review of the TEC Connections Academy Commonwealth Virtual School
November 2016

Virtual school renewal inspections are conducted in accordance with CMR 52.11:
 "The decision by the Board to renew a certificate shall be based upon the presentation of affirmative evidence regarding the faithfulness of the virtual school to the terms of its certificate, the virtual school's academic program, and the viability of the virtual school as an organization. The Department will gather evidence regarding these issues from the renewal application and from other information, including but not limited to, a virtual school's annual reports, financial audits, test results, accountability review reports, and the renewal inspection report."

Date of visit: November 3, 2016
Date of this report: December 19, 2016

This document was prepared by the
Massachusetts Department of Elementary and Secondary Education
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School profile

TEC Connections Academy Commonwealth Virtual School (TECCA) opened in 2014 as a virtual public school serving students in grades K-12. The Education Cooperative (TEC) as "founder entity" submitted an application for a virtual certificate to the Department of Elementary and Secondary Education (ESE) in the spring of 2013; on February 25, 2014, the Board of Elementary and Secondary Education approved a 3-year operating certificate for TECCA under the state's virtual school legislation (Chapter 379 of the Acts of 2012). Per its certificate, TECCA may enroll a maximum of 2,000 students in the 2016-17 school year.

Educational courses and teaching services, including management software, learning materials, and technical support services are provided by Connections Education (CE), based in Baltimore, Maryland.

ESE previously conducted accountability reviews of TECCA on December 3, 2014[1], May 20, 2015, and February 24, 2016. Over this period student enrollment has grown from 498 to 970 students. As of the week ending October 28, 2016 enrollment was 1,247 students: 213 in grades K-5 (elementary), 323 in grades 6-8 (middle school), and 711 in grades 9-12 (high school).[2]

The school's certificate expires at the end of the 2016-17 school year. Pursuant to CMR 52.11, and in accordance with guidelines published by ESE, TECCA submitted an application to renew its certificate on May 26, 2016.

Description of the accountability review

On November 3, 2016, the following members of the accountability review team ("team") visited TECCA at its administrative offices, located at 141 Mansion Drive in East Walpole, Massachusetts:

- Kenneth Klau, ESE
- Jennifer Gwatkin, ESE
- Sibel Hughes, ESE

- Julie Sinclair, ESE
- Wyvonne Stevens-Carter, ESE
- Joanna Laghetto, ESE

The following individual contributed to the review:

- Bridgette Kelly, ESE

The team reviewed the following information:

- Application for certificate renewal
- Annual report, FY15 (January 2016)
- Audit, FY15 (January 2016)
- Annual goals (2014-16)
- Accountability reports from December 2014, May 2015, and February 2016
- Personnel policies, including the TECCA employee handbook
- Board meeting agendas and minutes
- Organizational chart and staff assignments
- Operational documents, including the state testing action plan
- Leadership team agendas and meeting minutes
- Rate adjustment documentation

- Teacher training documents
- Sample teacher evaluation documents, including the TECCA-developed Massachusetts Virtual Public School Model for Educator Evaluation teacher rubric
- Documentation of professional development activities
- CE resource documents for families and learning coaches, including learning coach resource sessions links and recordings
- Documentation of school-sponsored events and outings
- Weekly newsletter
- Student handbook supplement
- English as a second language (ESL) program statement and associated English language learner

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[1] The purpose of this initial visit was to provide feedback to TECCA regarding its progress in implementing the educational program described in its certificate and with respect to selected virtual school performance criteria. Virtual.
[2] An additional 332 courses are taken by students enrolled in their districts of residence.

- Special education program statement
- Special Education Procedural Manual
- Special education and 504 plan tally
- 2015-16 course completion data

(ELL) documents, including the CE ELL handbook
- Student demographic information
- Curricular materials, including an alignment of the school's curriculum to the Massachusetts Curriculum Frameworks; "power standards" and curriculum based assessments

The team collectively observed 26 online lessons (LiveLessons[3]) in real-time over a two-month window in October and November 2016.

On site, the team conducted focus group interviews with representatives from the following groups: school leaders (6); board of trustees (4); special education (5, including TECCA's new director of special education); "specialists"[4] (8); K-5 teachers (5); middle school teachers (4); high school teachers (6); learning coaches[5] of early elementary school students (2); learning coaches of middle school students (4); high school learning coaches (5); elementary school students (3); middle school students (6); and high school students (5).[6]

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[3] LiveLessons ("online lessons") are synchronous lessons conducted in Connexus, the school's learning management system ("LMS").

[4] Consisting of the school counseling director, three counselors, the advisory coordinator, the individualized education program coordinator, the student support team leader for grades K-12, and the teacher who oversees truancy.

[5] The person who supports the student's education in the home is called a learning coach, typically the student's parent/guardian. Learning coaches are responsible for their student's day-to-day activities. See also the description of the learning coach role on the TECCA website.

[6] Membership in focus groups was not mutually exclusive. Members were solicited by school leadership. Learning coach and student focus groups were largely conducted via telephone.

Findings

Rating Scale:

● **Exceeds**   The school fully and consistently meets the criterion and is a potential exemplar in this area.

● **Meets**   The school generally meets the criterion; minor concerns are noted.

● **Partially meets** The school meets some aspects of the criterion but not others and/or moderate concerns are noted.

● **Falls far below** The school falls far below the criterion; significant concern(s) are noted.

Guiding area	Criteria		Rating
Faithfulness to certificate	1. **Mission and key design elements:** The school is faithful to its mission, implements the key design elements outlined in its certificate, and substantially meets its accountability plan goals.		● Meets
	2. **Access and equity**: The school ensures program access and equity for all students eligible to attend the school.		● Partially meets
	3. **Compliance**: The school compiles a record of compliance with the terms of its certificate and applicable state and federal laws and regulations.		● Partially meets
Academic and program success	4. **Student performance**: The school consistently meets state student performance standards for academic growth, proficiency, and college and career readiness.		● Partially meets
	5. **Program delivery**: The school delivers an academic program that delivers improved academic outcomes and educational success for all students.	Curriculum	● Partially meets
		Instruction	● Meets
		Assessment and program evaluation	● Meets
		Diverse learners	● Falls far below
	6. **Culture and family engagement:** The school supports students' social and emotional health in a safe and respectful learning environment that engages families.	Social, emotional, and health needs	● Meets
		Family and community engagement	● Meets
Organizational viability	7. **Capacity:** The school sustains a well-functioning organizational structure and creates a professional working climate for all staff.	School leadership	● Meets
		Professional climate	● Meets
		Contractual relationships	● Meets
	8. **Governance:** The Board of Trustees act as public agents authorized by the state and provide competent governance to ensure the success and sustainability of the school.		● Partially Meets
	9. **Finance:** The school maintains a sound and stable financial condition that operates in a fiscally responsible and publicly accountable manner.		● Meets

Faithfulness to certificate

1. Mission and key design elements

Rating: Meets

In its third year of operation, TECCA stakeholders expressed a collective understanding of the school's mission. Participants in all focus groups spoke to TECCA's commitment to actualizing its mission via individualized support based on student needs and an emphasis on communication.

As articulated in its certificate, the mission of TECCA is "to provide a rigorous, effective virtual K–12 public school that provides students with multiple pathways to learn, communicate, collaborate and successfully compete for advancement in our global society whether they pursue college or career."

When teachers were asked how they know the school is meeting its mission, they talked about serving students with a diversity of needs: students with chronic illnesses; students with severe anxiety; actors with rigorous travel schedules; and academically advanced students.

Learning coaches cited the flexibility offered by the virtual program, the level of engagement students have with their teachers, and the transparency Connexus provides in terms of student progress and performance. Those with academically advanced students as well as those with students needing extra support expressed that their students are being sufficiently challenged. Those with younger students cited the "gradebook" function, which permits them see how their student is doing and adjust the pace of student learning and timing of assessments.

When asked how they would describe the school to a friend who does not go to TECCA, middle and high school students expressed that despite a "learning curve" (i.e., in getting used to the virtual model)", they enjoy the ability to learn at their own pace and access school anywhere, anytime.

Since TECCA opened in the fall of 2014, student enrollment has grown each year. School leadership noted a commensurate increase in the number of students with diverse learning needs and demographic backgrounds. At the time of the visit, 35% of students were classified as "economically disadvantaged", 21% received special education services, and 10% received accommodations through Section 504 of the Individuals with Disabilities Education Act (IDEA). School leadership and board members noted the concomitant challenges of maintaining low student to faculty ratios; providing necessary accommodations, services, and supports; and fostering close connections with students and parents/guardians (the latter two were cited by members of the K-5 teacher focus group as the biggest challenges they face in the virtual environment).

When asked how they see the school's mission evolving over time, board members cited continuing efforts to provide the "best alternative educational opportunity possible," including providing more face-to-face opportunities for parents/guardians and students to interact with one another and with faculty.

2. Access and equity

Rating: Partially meets

TECCA does not make explicit outreach to the parents/guardians of English language learners (ELLs) and is still adjusting to a marked increase in ELL enrollment.

TECCA's advertising materials are only printed in English, and the school did not report engaging in explicit outreach to parents/guardians who speak languages other than English.[7] However, school staff report a significant increase in ELLs. In the 2015-16 school year, TECCA served 6 ELLs; that number has now increased to 34, with an additional 76 students classified as "potential" ELL. The school attributes this increase to expanded awareness of TECCA among social groups such as religious institutions. The team also made

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[7] According to the "Support for English Learners" section of the TECCA website, "All enrolling students complete a Home Language Survey. TECCA uses responses to this survey to identify LEP students. Students are then screened using the WIDA ACCESS Placement Test (W-APT) to determine their English proficiency level and to assist in the crafting of an individual instructional plan in cooperation with TECCA's Language Acquisition Committee (LAC)."

observations about the extent to which the school's instructional program supports ELLs once enrolled; these findings are addressed later in this report.

Approximately 21% of the student population receives special education services. Per special education state regulations, TECCA is required to have a special education advisory council. Established in 2015-16, the council has yet to meet in 2016-17. Historically the council's membership consists of 4-5 parents/guardians. School leadership reported that the goal of the council is to be "parent/guardian-driven," meaning parents/guardians select a topic to discuss or address from a list provided to them by the school.

The school leadership team analyzes student attrition data monthly using a report generated by CE that indicates the reason or reasons parents/guardians withdrew their children from TECCA (self-reported). The leadership team provided two examples of how it used this information to improve programming:

- Based on a pattern of parents/guardians withdrawing their children due to a lack of opportunities for socialization, in 2016-17 TECCA instituted a monitored "virtual recess" for elementary students. Virtual recesses incorporate movement; for example, an elementary teacher played a song for students to dance to.
- In 2016-17, TECCA formed "TECCA Mingle Zones" (TMZs), geographic clusters within which parents/guardians and students participate in school-sponsored activities with staff members. Per school leadership, collectively they will provide a minimum of 32 distinct opportunities for interaction (TMZs are described later in this report).

3. Compliance

Rating: Partially meets

TECCA demonstrated compliance regarding having an educator evaluation framework aligned to state expectations, but lacks an English language education (ELE) curriculum to supports its growing English language learner (ELL) population.

In 2016-17 TECCA is implementing a new virtual school educator evaluation rubric, which is described in detail in other sections of this report, and documents compliance with the Massachusetts regulations on evaluation of educators. TECCA has also modified its existing "end-of-course student feedback survey" to align with the ESE Model of Student Feedback. Data from student surveys will be shared with staff, and individual staff feedback will be shared and discussed with performance reviews.

Members of the focus groups reported that the school is just beginning to develop supports to serve its growing ELL population. Additionally, TECCA does not have an English language education (ELE) curriculum.[8]

Academic and program success

4. Student performance

Rating: Partially meets

TECCA was classified into Level 3 of the state's accountability and assistance system for very low MCAS participation (less than 90%) in the aggregate and for multiple subgroups. Across each subject and student group, TECCA received a rating of On Target or Above Target on 11 of 18 academic indicators, No Change on 4 indicators, and Below Target on 3 indicators. In both the 2014-15 and 2015-16 school years, TECCA's reported attendance rates (86.1% and 88.9%, respectively) were among the lowest of any school district in the state

TECCA administered paper-based MCAS tests in English language arts (ELA), mathematics, and science and technology/engineering (STE) for the second time in 2016-17. Although the school has insufficient data for ESE

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[8] ESE oversees district compliance state and federal education laws and regulations in the areas of special education, civil rights, and ELE through the Coordinated Program Review (CPR) process. TECCA is scheduled to receive this full compliance review in 2018-2019.

to calculate an accountability rating based on statewide assessment data, TECCA was classified into Level 3 of the state's accountability and assistance system for very low MCAS participation (less than 90%) in the aggregate and for multiple subgroups. [9] When the change in MCAS participation rates is compared between 2015 and 2016, TECCA demonstrated declining participation rates across all student groups in all subjects as indicated in the tables below.

2015-16 MCAS Participation Comparison: English Language Arts					
	2015		2016		Change
	N	Percent	N	Percent	
African American/Black	21	100%	26	84	-16
White	192	95%	287	91	-4
Students w/disabilities	50	89%	79	81	-8
Economically disadvantaged	105	96%	165	88	-8
Hispanic/Latino	24	96%	44	83	-13
Multi-race, Non-Hispanic/Latino	17	100%	29	78	-22
High needs	130	95%	201	87	-8
All students	263	96%	403	90	-6

2015-16 MCAS Participation Comparison: Mathematics					
	2015		2016		Change
	N	Percent	N	Percent	
African American/Black	24	100%	23	85	-15
White	196	94%	277	90	-4
Students w/disabilities	52	87%	76	80	-7
Economically disadvantaged	106	95%	159	89	-6
Hispanic/Latino	26	100%	43	89	-11
Multi-race, Non-Hispanic/Latino	15	94%	28	80	-14
High needs	133	93%	193	87	-6
All students	270	95%	386	89	-6

2015-16 MCAS Participation Comparison: Science and Technology/Engineering					
	2015		2016		Change
	N	Percent	N	Percent	
African American/Black	-	-	-	-	-
White	59	91%	109	87	-4

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[9] In 2016, assessment participation was calculated two ways: First, the 2016 participation rate for each subgroup in each subject area test was calculated. If the actual 2016 participation rate was lower than 95 percent for any group in any subject, that rate was compared to the average of the most recent two years of assessment participation data for that group and subject. The higher of the two resulting rates was factored into the assignment of the school or district's 2016 accountability and assistance level.

| Students w/disabilities | 20 | 89% | 28 | 76 | -13 |
Economically disadvantaged	34	92%	59	85	-7
Hispanic/Latino	-	-	-	-	-
Multi-race, Non-Hispanic/Latino	-	-	-	-	-
High needs	41	91%	70	85	-6
All students	77	91%	143	87	-4

For the first time, TECCA received ratings for the change in student performance between 2015 and 2016.

In ELA, TECCA received an *On Target* rating for narrowing proficiency gaps between 2015 and 2016 in the aggregate and for all student subgroups and earned extra credit for increasing the percentage of students scoring *Advanced* by 10% or more (for students with disabilities) and for decreasing the percentage of students scoring *Warning/Failing* on MCAS tests by 10% or more (for economically disadvantaged students). For growth, TECCA received a *Below Target* rating in the aggregate and an *On Target* rating for White students. The chart below compares the percentage of TECCA students scoring *Proficient* or higher on the ELA MCAS as compared to the state in 2015 and 2016.[10]

2015 MCAS English Language Arts TECCA-State Comparison
Percentage of Students Scoring Proficient or Higher

STATE ■ TECCA

|	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
STATE	60	53	71	70	70	80	91
TECCA	50	24	35	71	65	84	93

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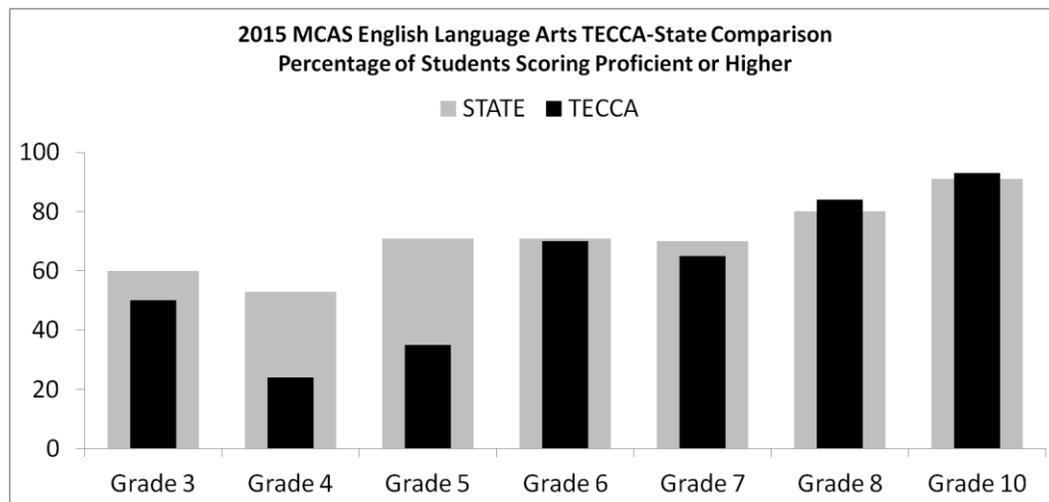
[10] Spring 2016 state-level achievement and growth results in grades 3-8 ELA and mathematics are not reported because most students in Massachusetts participated in the PARCC test., and for this reason, it was not possible to generate a representative sample to allow for statewide results.

2016 MCAS English Language Arts TECCA-State Comparison
Percentage of Students Scoring Proficient or Higher

■ STATE   ■ TECCA
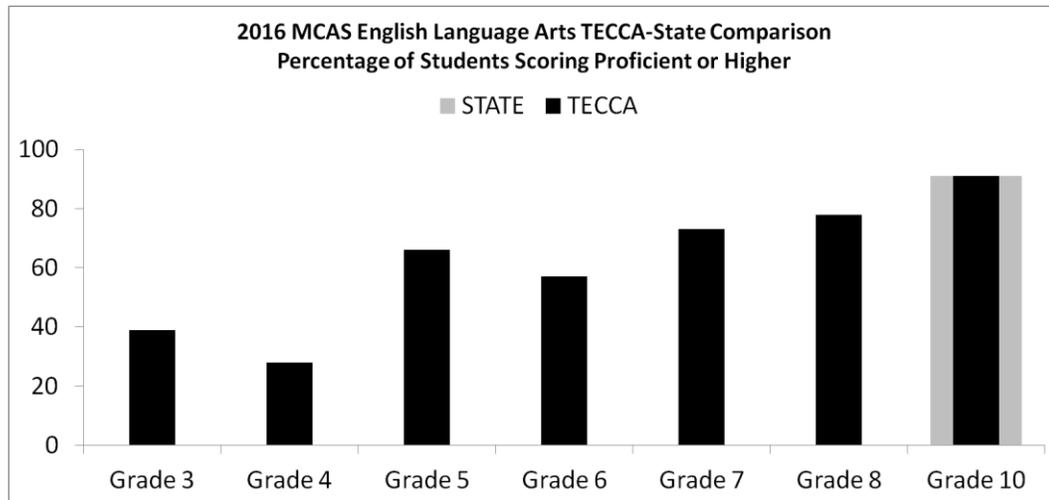
In mathematics, TECCA received an *On Target* rating for students with disabilities and a *No Change* rating in the aggregate and remaining student subgroups. TECCA earned extra credit for increasing the percentage of students scoring *Advanced* by 10% or more (for students with disabilities and White students). For growth, TECCA received a *Below Target* rating in the aggregate and for White students. The chart below compares the percentage of TECCA students scoring *Proficient* or higher on the mathematics MCAS as compared to the state in 2015 and 2016.

2015 MCAS Mathematics TECCA-State Comparison
Percentage of Students Scoring Proficient or Higher

■ STATE   ■ TECCA

**2016 MCAS Mathematics TECCA-State Comparison
Percentage of Students Scoring Proficient or Higher**

STATE ■ TECCA
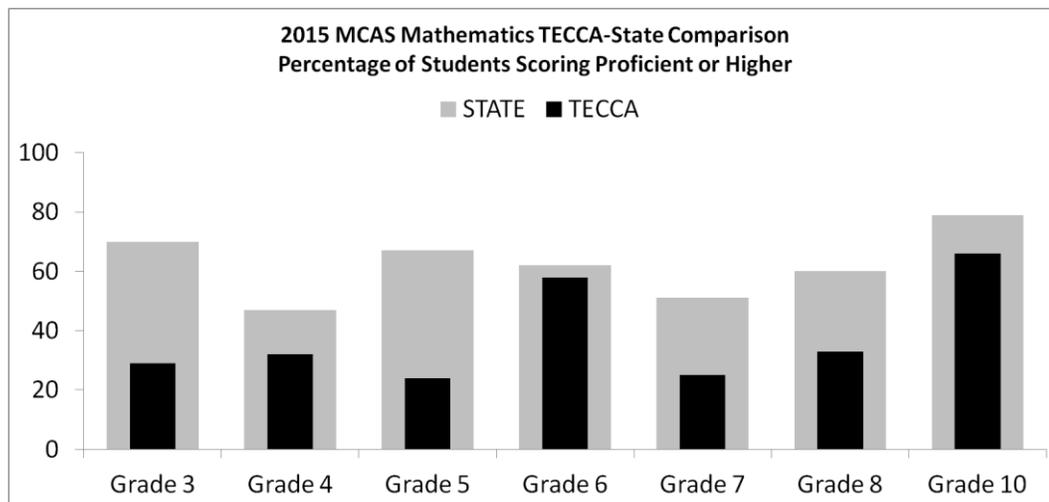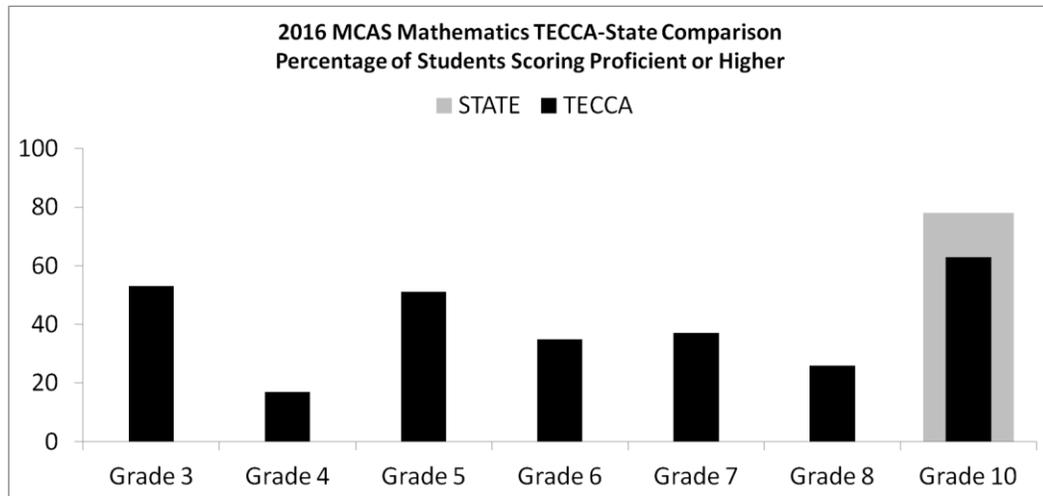
In STE, TECCA received an *On Target* rating in the aggregate and *Above Target* rating for student subgroups. TECCA earned extra credit for increasing the percentage of students scoring *Advanced* by 10% or more and for decreasing the percentage of students scoring *Warning/Failing* on MCAS tests by 10% or more (in the aggregate and for high needs, economically disadvantaged, and White students).

**2015 MCAS Science and Technology/Engineering TECCA-State Comparison
Percentage of Students Scoring Proficient or Higher**

STATE ■ TECCA

2016 MCAS Science and Technology/Engineering TECCA-State Comparison
Percentage of Students Scoring Proficient or Higher

■ STATE ■ TECCA
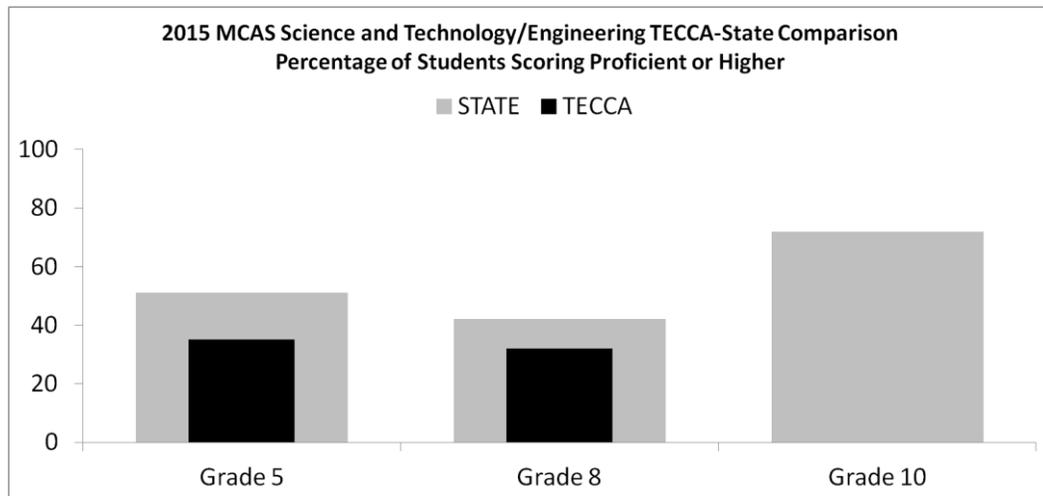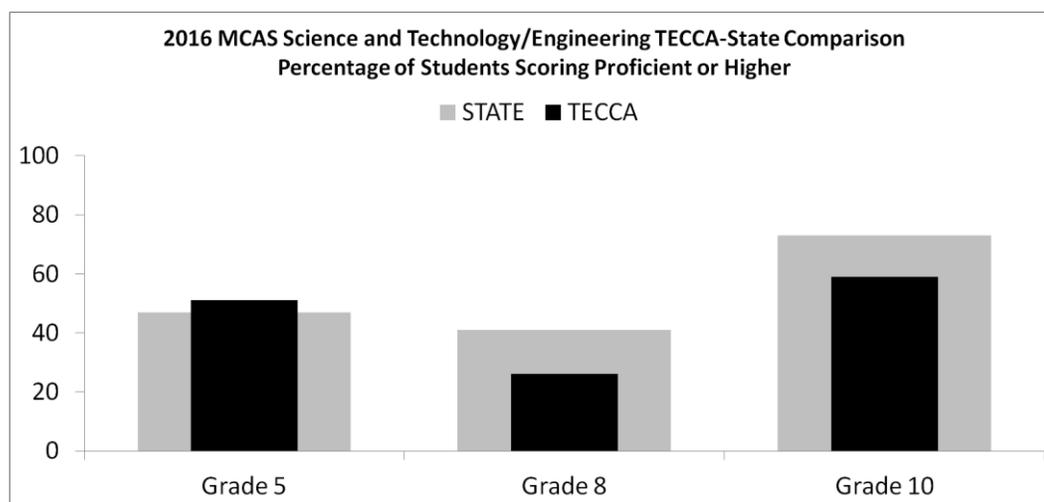
In the past, members of the high school student focus group expressed a desire for more challenging courses, including additional Advanced Placement choices. Additionally, TECCA leadership indicated a desire to take advantage of the virtual platform to offer a wider array of courses than provided in the general curriculum. Beginning in the 2014-15 school year, TECCA received permission from ESE to offer students, on a case-by-case basis and under limited circumstances, access to courses outside the core curriculum subjects (e.g., Chinese, Astronomy, etc.) through International Connections Academy (iNaCa), CE's online private school.

In both the 2014-15 and 2015-16 school years, TECCA's reported attendance rates were among the lowest of any school district in the state. School leadership reported that efforts to encourage participation in LiveLessons should result in improved student attendance in 2016-17. Specialist teachers reported increased efforts to educate learning coaches about the importance of logging daily student attendance. TECCA demonstrated improvement in their attendance rate, a decrease in absentee rates over the last two school years, and a 3% decrease in during school year withdrawals, but also reported a decreased retention rate over this period.

Student Attendance and Retention, SY2014-15 – SY 2015-16

	2015	2016	Change
Attendance rate	86.1	88.9	2.8
Average # of days absent	14.4	13.4	-1
Absent 10 or more days	38.5	32.8	-5.7
Chronically absent (10% or more)	42	35.6	-6.4
Unexcused absences > 9	38.4	30.9	-7.5
Retention rate	17.3	15.6	-1.7

5. Program delivery - Curriculum

Rating: Partially Meets

TECCA's curriculum is aligned to the Massachusetts Curriculum Frameworks and staff are involved in reviewing and revising the curriculum as needed; however, TECCA lacks an English language education (ELE) curriculum to support its growing English language learner (ELL) population.

Evidence indicates that TECCA's curriculum is aligned to the Massachusetts Curriculum Frameworks. The school maintains that its curriculum is also aligned to selected national standards, including Next Generation Science Standards (NGSS), National Council for the Social Studies (NCSS), National Education Technology Standards, and International Association for K–12 Online Learning (iNACOL) standards for quality online courses where applicable. TECCA received National Collegiate Athletic Association (NCAA) approval for most high school courses in September 2016. In most online lessons observed, teachers posted the state standards addressed as well as lesson expectations and objectives.

The existence of curriculum development and review processes was supported by members of the focus groups. TECCA board members indicated that staff participate in monthly LiveLessons with CE to discuss alignment issues as they arise. Per the focus groups, each subject in the CE curriculum is reviewed every 3-4 years. Teachers reported having flexibility in supplementing the CE curriculum with their own materials.

TECCA lacks an English language education (ELE) curriculum to support its growing English language learner (ELL) population.

5. Program delivery - Instruction

Rating: Meets[11]

Lessons observed were characterized by a positive classroom climate, followed the school's prescribed format for lesson presentation, demonstrated alignment with stated standards, and exhibited teacher-student engagement.

In October and November 2016, the renewal inspection team reviewed 26 online lessons ("LiveLessons") in real-time, comprising over 1,300 minutes of instruction. Team members recorded their observations on a common observation form. The average lesson was 50 minutes long, and the average class size was 18.5 students (6 of the 26 lessons observed featured 2 teachers). Prior to conducting these observations, the team received descriptions of expected practices aligned to ESE's criteria for classroom culture and management and quality instruction (Appendix A). The percentages of lessons observed that, in the determination of the review team, exhibited these practices are provided in the graph below.

Figure 1: Observed practices - online lessons
■ No evidence   ■ Limited evidence   ■ Sufficient evidence   ■ Consistent evidence

	No evidence	Limited evidence	Sufficient evidence	Consistent evidence
Climate	0%	8%	12%	81%
Alignment	0%	8%	15%	77%
Engagement	0%	8%	23%	69%
Time	0%	12%	12%	77%
Model	4%	8%	23%	65%
Differentiation	4%	8%	19%	69%
Understanding	4%	15%	8%	73%
Complexity	4%	19%	23%	54%

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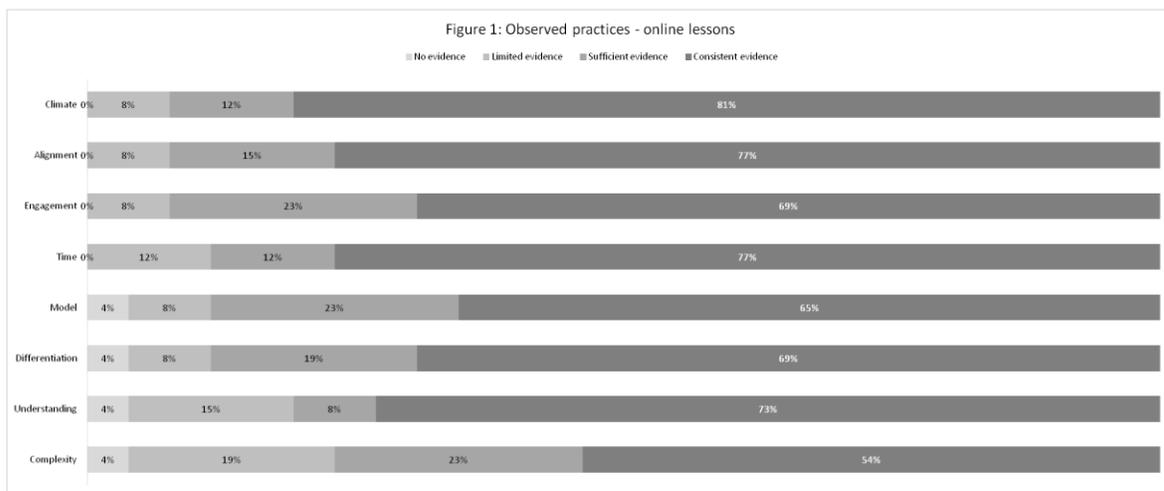
[11] Ratings are based solely on a sample of online lessons reviewed by the team. Per the school's instructional delivery model, these sessions, while strongly encouraged, are not mandatory.

LiveLessons accompany self-paced and self-directed learning that occurs asynchronously. Since the February 2016 accountability review, TECCA has expanded its emphasis on student attendance in LiveLessons. Although not mandatory, the school strongly encourages participation in LiveLessons, and all lessons are recorded for students to view. To better track attendance, both live and recorded lessons feature a "keyword" spoken by the teacher that students enter a text box at the end of each week, worth a grade. Per school leadership and teachers, TECCA subsequently experienced a large increase in attendance in LiveLessons. Of the classes observed by the review team, participation ranged from 1 to 49 students.

Across lessons, 93% exhibited sufficient or consistent evidence that the climate was characterized by clear routines, respectful relationships, behaviors, tones, and discourse ("climate" in Figure 1 above), as compared with 89% in the February 2016 review and 94% in the May 2015 review. Teachers were consistently visible in the video pod at the start of each lesson; greeted students as they entered the room, often individually; and began and ended lessons on schedule. Curriculum standards, agendas, objectives, and norms were routinely posted; in many lessons teachers verbally reminded students of these expectations. Teachers and students were observed using LMS tools (breakout rooms, chat pod, student microphone, whiteboard, and video). During discussion periods, students were reminded to use their microphones and the chat pod to participate. In general, teachers' verbal and typewritten comments and instructions were relevant and clear, and student-teacher and student-student interactions were respectful and educationally appropriate.

In 92% of lessons observed, classroom practices exhibited sufficient or consistent evidence of student engagement ("engagement" in Figure 1 above; in February 2016, it was 86% and in May 2015 it was 82%). Most teachers demonstrated command over LiveLesson technology such as polling; clearing pods; closing and opening "breakout rooms"; and granting chat, microphone, and video rights to students. Teachers encouraged students to participate throughout by asking follow-up questions, soliciting volunteers, and calling on students with "hands raised" to respond verbally or via chat. In some lessons students had the opportunity to use their microphones but elected to type rather than speak. In a small percentage of lessons observed, not all students participated in breakout rooms.

In 92% of lessons observed, instruction featured sufficient or consistent evidence of content and skills aligned to grade level standards and/or students' educational needs ("alignment" in Figure 1 above; in February 2016, it was 83% and in May 2015 it was 87%). With few exceptions, reviewers noted that the state standards and learning objectives to be addressed were posted at the start of sessions; teachers provided students with step-by-step explanations of agendas, featuring tasks and activities, along with class expectations; and materials and classroom work aligned closely with stated grade-level objectives.

In 89% of lessons observed, there was sufficient or consistent evidence to demonstrate that learning time is maximized for all students ("time" above; in February 2016, it was 81% and in May 2015 it was 78%). Lessons generally began and ended on time. Most were organized per an agenda and objectives, displayed and previewed by the teacher. With few exceptions, all the stated activities for lessons were covered at a pace that seemed appropriate for all learners. Students remained on task throughout most lessons by engaging in a variety of activities. For example, in one elementary school session the teacher monitored the time and provided updates, ensuring all elements of the lesson were completed. Each of the students in the class contributed to discussion and responded to an independent practice poll. In a larger lesson with over 30 participants, students were generally engaged and on-task throughout. One teacher corrected distracting behavior and endeavored to redirect those students; at one point taking away chat pod privileges. A minority of lessons did not maximize learning time for all students: some teachers only called on students who raised their hands; students expressed confusion about activities; students were less productive in breakout rooms; students' chat was not related to the lesson; teachers seemed unprepared, struggling to find links, and 15 minutes elapsed with no teaching.

In 88% of lessons observed, instructional practices exhibited sufficient or consistent evidence of the school's expected practices ("model" in Figure 1 above; it was 76% in February 2016 and 59% in May 2015). LiveLessons were usually conducted in a manner consistent with the expectations and description provided by school leadership in Appendix A. Teachers began lessons on time with an activity (a poll, for example) to engage students. Teachers were attentive to student comments and questions, addressing them completely and appropriately in real-time. When there were two teachers in the session, one teacher almost exclusively responded to students' comments and questions, the other kept the flow of the lesson going and maintained

engagement. Observers noted that teachers were usually able to quickly redirect when a student question was off-topic (for example, one student asked mid-lesson who the new student was, and the teacher answered and transitioned immediately back to the lesson). Teachers encouraged students to be detailed and thoughtful in their responses. In most lessons, observers saw the attendance keyword posted.

In 88% of observed lessons, activities, materials, and strategies demonstrated consistent or sufficient evidence of differentiation to support the needs of diverse learners ("differentiation" in Figure 1 above). By contrast, this was 70% in February 2016 and 63% in May 2015. Polling and chat pods were the most widely used strategies, along with open-ended, multiple-choice, and follow-up questions. Techniques included visuals (e.g., video, book, power point, pointer, underlining tool, T-chart, Venn diagram); songs; opportunities to write out responses to open-ended questions; and engaging in breakout rooms with smaller groups. Within breakout rooms, gradual release strategies[12] were employed and students worked collaboratively on activities like solving multi-step problems. In general, student "voice" was most evident in the chat function, although students were routinely given the option of answering verbally.

Across lessons, 81% (as compared with 85% in February 2016 and 84% in May 2015) demonstrated sufficient or consistent evidence of teachers using various checks for understanding throughout lessons ("understanding" in Figure 1 above) consistent with the practices described in Appendix A. In many lessons, reviewers observed the use of poll pods for assessing students' prior knowledge. In more robust lessons there were multiple instances of interactive dialogue, and students were either cold-called or asked to volunteer answers. Teachers often solicited feedback from all students throughout the lesson. In one lesson, the teacher used the poll pod at the beginning to gauge students understanding and asked a series of open-ended questions during the lesson. One teacher asked students to "give a red cross" to indicate if they understood, while simultaneously reassuring students that "nobody else can see (the red cross)" but the teacher. The teacher then checked in with those students who gave the red cross. After the lesson this teacher stayed in the room to offer help to students who wanted to stay.

In 77% of lessons observed, students were challenged to develop and use skills such as analyzing, creating, and evaluating ("complexity" in Figure 1 above; this was 77% in February 2016 and 59% in May 2015). In such lessons, teachers posed open-ended questions and prompted students provide deeper responses. For example, in one class the teacher asked "how do you know?", "what do you think we should do?", and "what should you do to figure out what symbol to use?", thereby requiring students to explain their thinking. In a literature lesson, the teacher encouraged students to support their answers with evidence from the text. In about a quarter of lessons, however, questions were simplistic, procedural, literal, or close-ended; or activities did not require higher order thinking skills.

5. Program delivery - Assessment and program evaluation

Rating: Meets

TECCA employs multiple interventions to address student needs and has systems in place to monitor the efficacy and impact of its instructional program.

When asked how TECCA evaluates the efficacy and impact of the various interventions used to address students' diverse learning needs, school leadership indicated that this is "ongoing" and cited as evidence progress on curriculum-based assessments (CBAs) and other measures. [13]

Per the staff, CBAs help validate students' understanding of concepts against formative data housed in Connexus and either validate mastery of key concepts or diagnose impediments to learning. Per the middle school focus group, homeroom teachers conduct all CBAs regardless of subject so that these teachers can gauge their students' level of mastery across all disciplines. Per the high school teacher focus group, each student receives at least one CBA per subject/teacher/semester.

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[12] Pearson, P. D., & Gallagher, G. (1983). The gradual release of responsibility model of instruction. *Contemporary Educational Psychology*, *8*(3), 112-123.

[13] CBAs consist of conversations between a teacher and student which take place via telephone or in online lessons.

TECCA implements an "Escalation System" for all students to alert them of their progress to being "on track" in the areas of attendance, participation, performance, last lesson completed, last assessment completed, and their maintaining regular contact with applicable TECCA teachers. The three-tiered system of alerts are "On Track," "Approaching Alarm," and "Alarm" which are noted on student's home-screens through colored "emoji faces." The "Escalation Rate" column in the table below reflects the percentage of students in an individual's teacher's homeroom who are in "Approaching Alarm" or "Alarm" status.

TECCA Escalation System Data (as of November 2016)					
Grade Band	N	On Track	Approaching Alarm	At Alarm	Escalation Rate
Elem. (K-5)	203	183 (90%)	10 (5%)	10 (5%)	10%
Middle (6-8)	242	202 (83%)	20 (8%)	20 (8%)	17%
High (9-12)	515	359 (70%)	95 (18%)	61 (12%)	30%
Total	**960**	**744 (78%)**	**125 (13%)**	**91 (9%)**	**22%**

Per the school leader, TECCA is determined to build a robust three-tiered response to intervention (RTI) program whereby students receive additional supports based on their needs. To that end, the school developed a District Curriculum Accommodation Plan (DCAP). The DCAP details the following supports that exist for all students in grades K-12 (Tier I): targeted LiveLessons for individual or small groups of students; regular check in calls; use of message boards to provide learning resources; office hours; use of breakout rooms during LiveLessons; running the scheduler (K-8); revisiting lessons to review material; MCAS questions presented in LiveLessons; expectations for conduct and participation within LiveLessons; access to school counselor; study guides (found on teacher message boards); and exemplar portfolio modeling.

Students whose needs exceed Tier I are referred to student support teams (SSTs). Per the specialist focus group, teachers provide DCAP supports for up to two weeks after which a formal referral is made to the SST. An SST always consists of an administrator, a counselor, and a teacher. The SST reviews the efficacy of the supports provided to a student, monitors student performance over time, and recommends additional supports if needed (Tier II). If the Tier II supports are not working, the student may be tested for learning disabilities. In general, the SST coordinator communicates with teachers regarding any specific situations (e.g., a student may be hospitalized) and relies upon data provided by teachers to identify supports.

One area of student performance cited by the leadership team was meeting or exceeding the state on measures of student proficiency and growth in mathematics. Middle school teachers cited the need to improve mathematics CBAs, while high school teachers reported comparing the curriculum and sequence of lessons to the curriculum frameworks to identify areas where skills may not be covered adequately (TECCA adjusts lessons each year between January and March). One hypothesis is that students need more visuals, which the leadership team said is harder to convey in the virtual environment as opposed to discussion. The leadership team created an action plan for mathematics that includes MCAS released items as well as "targeted sessions," small group lessons that occur outside whole-class meetings and focus on specific needs identified through CBAs.

In addition, TECCA has supplemental instructional support programs, or SISPs, which use data from the school's LEAP assessment to flag students for additional programming and delivery of lessons at their level. TECCA offers "open office sessions" at all levels, which the leadership team reports are well-attended. One-on-one LiveLessons are also available by appointment and TECCA is exploring virtual one-on-one tutoring. The leadership team acknowledges that they continue to investigate the "root causes" of low mathematics performance.

TECCA invites parents/guardians to comment on student progress, teacher support, and curriculum quality via an annual satisfaction survey administered by third party Shapiro+Raj for CE. Selected results from the most recent survey, conducted in March 2016, are available on the TECCA website.

5. Program delivery - Diverse learners

Rating: Falls far below

TECCA provides insufficient support to English language learners.

TECCA serves many students supported by Individualized Education Programs or IEPs (21%), students supported by Section 504 plans (10% of the population) and a growing English language learner population that increased from 6 students in 2015-16 to 34 at the time of the visit.

The most common instructional accommodations are regular "check-ins with the school counselor; assistance in organizing large portfolio assignments; and extra time on tests and assignments. Accommodations for student participation in state assessments include frequent breaks, small groups, clarification of test questions, separate or individual settings, and reading the test aloud.

Per the special education focus group, students with social-emotional disabilities can be supported through flexible schedules, frequent breaks, skipping lessons, and asynchronous lesson participation. Such students receive weekly counseling, either from TECCA staff or private therapists – the latter having permission to share information with the school. The specialist teachers noted that the IA system provides a channel for collaborative problem-solving between specialist and general education teachers around issues. Both teachers and learning coaches reported that TECCA provides opportunities for students to engage in the ways students feel most comfortable.

Students with disabilities receive instruction in small groups and via inclusion in regular classes. Accommodations, supports, and adaptations observed by the review team included use of the question-and-answer pod and small group breakout rooms.[14] In one substantially separate classroom, the reviewer observed no visible accommodations or supports, but found that the teacher included all students, answered questions and comments, and communicated directly with a student's learning coach.[15]

Members of the specialists focus group described the process for identifying and serving ELLs. ELLs are identified through a combination of the home language survey, Connexus, student records, speaking with families, and, ultimately, screenings (completed in October 2016). However, the focus group reported that TECCA does not have an ELE curriculum and provides limited to no specialized support for ELLs, (although all TECCA teachers have obtained the Sheltered English Immersion (SEI) endorsement), and does not offer translation services. The only specialized instruction for ELLs shared by the focus groups consisted of teachers providing "1:1 support for identified ELLs." Although TECCA reports that its ELL student population, and how those needs are met in the classroom, has been the subject of professional development in two faculty meetings, this documentation was not provided to the team.

With respect to sheltered English immersion instruction (SEI), whereby ELLs are in the same classrooms as native English-speaking students, reviewers observed question-and-answer pods and small breakout rooms.[16] Evidence of the stated SEI strategy of scaffolding was limited. In one LiveLesson the teacher used scaffolding techniques to address the content covered during the lesson, but it was difficult to discern the content objective. In another, the teacher repeated herself but scaffolding was minimal. Reviewers noted that in several instances there was no stated language objective or focus during such lessons.

All incoming students receive a "welcome letter" from TECCA and a telephone call from the homeroom teacher. Per the specialists focus group, K-8 course placement is handled remotely by the CE enrollment department in Baltimore. High school course placement is handled by the director of school counseling and

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[14] TECCA reportedly utilizes private messaging to prompt students and provide support. However, this strategy would not be observable to participants other than the teacher and the student.

[15] While assistive technology (AT) like private messaging may have been utilized in LiveLessons, they would not have been readily observable to the reviewers. Per TECCA the only observable AT would be closed captioning or sign language interpreting; however, none of the students observed utilized these services. In addition, TECCA noted that it offers related services they would not be observable in a LiveLesson room.

[16] Private messaging to prompt students and provide support may have been employed in LiveLessons, although this would not have observable to reviewers.

based on transcripts, report cards, schedules, and credit accumulation. Students also can indicate their course preferences, if any, and review the courses that are selected for them before finalizing enrollment.

6. **School culture and family engagement**

Social, emotional, and health needs; family and community engagement

Rating for both indicators: Meets

TECCA is responsive to the needs of families and cultivates a learning environment where students and families feel safe, supported, and included within and beyond the virtual classroom.

The person who supports the child's education in the home is called a "learning coach." These individuals, typically the student's parent/guardian, are responsible for students' day-to-day activities.[17] Elementary learning coaches described a hands-on approach, with daily lessons providing descriptions of what they must do to check student understanding. Middle grades learning coaches reported "taking a back seat" by promoting greater independence and encouraging students to communicate with their teachers directly for help solving problems. The learning coaches said that Connexus has a planner that helps students organize their time, track lessons, and log student-teacher appointments. All learning coaches must complete weekly student attendance logs.

In response to feedback from parents/guardians to offer more face-to-face activities in proximity to their homes, TECCA launched the TECCA Mingle Zone (TMZ) initiative in 2016-17. TMZs are geographic areas within which face-to-face activities like field trips and social outings are offered. There are 7 TMZs organized along county lines as follows: Barnstable, Berkshire, Bristol/Plymouth, Franklin/Hampshire/Hampden, Middlesex/Essex, Norfolk/Suffolk, and Worcester. Each TMZ has a team of teachers who arranges activities in their area. Per school leadership, at least 4 field trips will occur in each TMZ during the year, are advertised via the weekly newsletter ("Talk of TECCA") and Connexus. Planned activities include a trip to the Museum of Science in Boston where students will explore science and mathematics, attend the Mugar Omni Theater, and eat in the café (Essex/Middlesex); and a trip to various museums in Springfield, including the Planetarium, the George Walker Vincent Museum of Art, and the Wood Museum of Springfield History (Franklin/Hampshire/Hampden). Members of the student and learning coach focus groups like the TMZ concept. They reported that the TMZ activities are cost effective, happen more frequently than comparable activities sponsored by brick-and-mortar schools, close to home, and aligned with what students are learning.

As part of the school leader's initiative for greater socialization and connectedness, TECCA underwent a formal process to create and establish a school council, or Parent Teacher Organization (PTO). After three open informational sessions, parents/coaches were given an opportunity to "run" for PTO Office. An open/online election was held and an Executive Committee of four parents, together with a series of Regional Representatives from the different TMZ's, was established after over 80 votes were cast. Within their first two meetings, the first of which was held on September 28, 2016, the PTO established bylaws and worked towards an Employer Identification Number (EIN) with plans to investigate fundraising, scholarships, and ways to recognize graduating seniors. Their mission statement was approved in cooperation with TECCA Leadership: "The TEC Connections Academy (PTO) is an organization whose purpose is to strengthen, enhance and encourage the educational and social environment of TEC Connections Academy. Its goals are to complement the school community with additional opportunities for parents, teachers and students to learn, socialize, communicate and grow." As part of the School Leader's initiative for greater socialization and connectedness, TECCA underwent a formal process to create and establish a Parent Teacher Organization. After three open informational sessions, parents/coaches were given an opportunity to "run" for PTO Office. An open/online election was held and an Executive Committee of four parents, together with a series of Regional Representatives from the different TMZ's, was established after over 80 votes were cast. Within their first two meetings, the P.T.O. has established Bylaws, is working towards an Employer Identification Number (EIN)

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[17] According to TECCA, and as is described in the "parental responsibilities" section of the TECCA website, the learning coach role shifts over time. In the elementary years, learning coaches are closely involved in helping students grasp the material and develop necessary study skills. As students become more independent in the middle school and high school years, the learning coach typically provides support, but far less daily supervision.

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The September 28, 2016 meeting agenda, which was provided to the review team shows the purpose of the meeting was to share information about the Title I program and discuss expectations for parent/guardian involvement. School leadership reported that approximately 80 families nominated people to serve on the council. As described on the TECCA school council website, the council maintains a regular meeting schedule (a meeting occurred on October 19, 2016 one was scheduled for November 30, 2016). Meetings are public in compliance with Open Meeting Law and open to students, parents/guardians, learning coaches, and teachers.

Per school leadership, contact with students and learning coaches is the biggest predictor of student success. To that end, TECCA continues to investigate ways to engage them. For example, while at a conference in San Antonio, school leadership sponsored a "virtual field trip" to the Alamo that was attended by 45 students.

Organizational viability

7. **Capacity – School leadership**

    Rating: Meets

    The leadership team is fully staffed, obtains staff commitment to improving student learning, promotes a positive professional culture, and seeks to implement a mission driven by specific goals.

    The leadership team is comprised of a school leader (equivalent to the position of superintendent/principal), who is in his second year at TECCA; an assistant principal, hired in spring 2016; a director of special education, hired in summer 2016; a director of student counseling who has been with TECCA since the school opened in 2014; a K-8 master teacher; a high school master teacher and a school counselor who also serves as student support team chair; a teacher who also serves as curriculum coordinator; a teacher who also coordinates family engagement; and TECCA's executive assistant.

    When asked to identify specific areas of student performance as priorities for improvement this year, TECCA's leadership cited three metrics: (1) reducing school year withdrawals, (2) raising promotion rates, and (3) meeting or exceeding the state average for proficiency and the median student growth percentile. A schematic developed by the school leader and presented to the review team captures TECCA's organizational structure and faculty team goals, which align with TECCA's certificate goals in the areas of state testing, promotion, graduation, during school year withdrawal, and family and community engagement. The leadership team monitors and evaluates teacher performance using a modified version of the state's model for educator evaluation (Attachment A).

    TECCA sought a waiver for computer based testing for spring 2017. Per school leadership, TECCA does not issue mobile devices such as laptops or Chromebooks unless students need them, and the cost of renting these devices for nine testing sites statewide exceeded what was budgeted for the 2016-17 school year. School leadership indicated the intention to issue mobile devices to all students beginning in the 2017-18 school year TECCA is consulting with Natick, a TEC member district, to investigate procurement and technical support supports, and is exploring possibilities ranging from device-based support from CE to local contracts through the TEC Collaborative, Consequently, the leadership team reports that TECCA will administer computer-based tests in all grades by the 2017-18 school year.

    TECCA proposed an increase in state per-pupil funding beginning in the 2017-18 school year. This is described in the finance section of this report.

7. **Capacity – Professional climate**

    Rating: Meets

    TECCA has formal and informal systems for regular, frequent collaboration and professional development.

At the time of the renewal inspection visit, TECCA reported a staff of 45 full-time employees (FTEs) to serve its growing student enrollment. TECCA has 5 elementary teachers (K-5), 6 middle school teachers (6-8), 16 high school teachers, 8 special education teachers (4 for grades K-8, 4 for high school), 6 school counselors (in addition to a guidance director), and 3 part-time/adjunct teachers to cover Spanish, business/technology, and art.[18] An assistant principal was hired in spring 2016 and a permanent director of special education was hired in summer 2016 following a prolonged period during which the position was filled through interim appointments.

School leadership described a plan to hire part-time homeroom teachers to alleviate the administrative burden on classroom teachers.[19] [20] By reducing the homeroom student-teacher ratio to 10:1, teachers will be able provide additional office hours and focus on curriculum, assessment, and instruction, scheduled to. Homeroom teachers will be subject to the same educator standards, and a bonus is built into the contract for those with satisfactory performance who remain employed at TECCA through the end of the year.

Per school leadership and teacher focus groups, teachers participate in teams called TECCA Instructional Committees (TIC's) which meet on Wednesday's during an embedded professional development schedule. Collaboration with remote staff is facilitated by Google Hangouts. Although CE historically provided most of the content, much of the professional development provided by CE is now optional and TECCA develops and delivers its own content, coordinated by school leadership but implemented by various staff with particular expertise. Topics include LiveLesson training, creating and monitoring message boards, teaching higher order thinking skills, understanding the truancy process and Child Find, and using data to inform instruction.[21] Teachers are also encouraged to suggest topics for professional development. Although more of the professional development is now conducted in-house, TECCA teachers continue to have access to the IA system to communicate with colleagues across the entire CE network. New teachers generally meet with their supervisors on a weekly basis and are part of a new teacher group that meets monthly; others meet biweekly. In these meetings, the teacher and supervisor review student performance and progress metrics, including grades, CBA data, and escalations. Teachers also use this forum to raise concerns about individual students and solicit feedback from their supervisors.

Mentoring for new teachers is provided via the TECCA New Teachers group (TNT), led by a veteran educator. Additionally, staff can avail themselves of professional development provided by TEC, the sponsor organization, which school leadership acknowledged is new. TECCA board members expressed appreciation that staff recognize that their learning is as important as that of the students.

In 2016-17 TECCA introduced a new rubric for educator evaluation designed by the school leader to account for the virtual school context. It integrates CE-and TECCA-specific criteria with those from the state's model for educator evaluation (Attachment A). All the steps toward achieving each teacher's professional practice and student learning goals are generated by action plans developed by lead teachers. Teacher focus groups spoke knowledgably about the newly-adopted rubric and indicated that they are evaluated both at mid-year and the end of the year. Observations are formal and informal, announced and unannounced, and occur more frequently for new teachers than returning teachers. The evaluation process is managed entirely by TECCA.

Deemed to be critical to the infrastructure of the organization, TECCA aimed to make the Career Ladder (CL) system of CE a more robust and dynamic leadership group within TECCA. For the 2016-17 school year, TECCA doubled points allocated for these stipend leadership positions to account for growing interest among staff to take leadership roles amidst growing tasks. The CL joins the leadership team on a monthly basis for a

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[18] In February 2016 two of the five special education teachers were CE employees.

[19] Following the visit, TECCA hired 5 part-time homeroom teachers who will begin work on December 5, 2016. The leadership team expressed that TECCA is constrained by funding, which is further described in the finance section of this report.

[20] The homeroom teacher is a non-teaching role with a focus on developing relationships with students and parents/guardians. This position involves weekly check-in calls with students and families.

[21] Child Find is a legal requirement that schools find all children who have disabilities and who may be entitled to special education services. Child Find covers every child from birth through age 21. The school must evaluate any child that it knows or suspects may have a disability.

"Leadership Summit." In a "Pulse Survey" given to all faculty in October 2016, 100% of faculty (87% survey participation rate) indicated the CL provided leadership opportunities for staff, and 100% indicated TECCA has a fair process for selecting individuals on the CL.

7. **Capacity – Contractual relationships**

Rating: Meets

TECCA renegotiated the terms of its agreement with CE, which resulted in a reduction of the fees paid to CE by TECCA and the transition of certain functions and services under CE's oversight to TECCA.

TECCA and CE operate under a three-year contract that coincides with the school's certificate term (FY15-FY17). On September 28, 2016, the TECCA board approved an amended contract [22] that reduced the fees paid to CE by TECCA and transitioned certain functions and services under CE's oversight to TECCA, including:

- Human resource services, including recruiting, pre-employment screening, applicant tracking, new hire onboarding, staffing management, payroll administration and timekeeping, collecting and remitting employee taxes, establishment of benefit plans and benefits administration, employee screening and background checks, supervision and performance management, training and development, tracking of training and certifications of TECCA employees, credential compliance, employee file recordkeeping, employee data reporting, management of workplace accommodations, leave management and FMLA administration and tracking, maintaining employee data in a human resource information system, and developing and maintaining employee policies and handbooks, etc.
- Special needs and ELL services, including development of IEPs; handling medications and administrative proceedings and specialized services; related services, including but not limited to occupational therapy, physical therapy, speech and language therapy, transition, counseling, personal care assistants, tutoring, behavior interventions, transportation, job coaching, social skills, and verbal behavior; Section 504 plans for accommodation of disabilities, including providing assistive technology; ELL accommodations, including translation materials and services, and nonstandard materials (including accessibility software, LiveLesson closed captioning, readers, braille and large print books, and braille printers); submitting state and/or federal reports; applying for and administering supplemental funding; and all other products, services and reporting obligations targeted specifically to students with disabilities and ELLs.
- Special education contracts, including all contracts entered by CE with a third party to provide services, technology (including software and/or hardware), products and/or materials for the specific purpose of providing targeted services to students with disabilities and ELLs.
- Human resource contracts, including all contracts entered by CE with a third party to provide services, technology (including software and/or hardware), and related products and.
- School facilities management.
- School oversight, including school goal creation, recommendation, implementation, and monitoring; developing operational protocols, procedures and services to support school operations and goal attainment; monitoring allocation of resources to ensure appropriate support and assistance is provided to all types of students; monitoring school metrics including grading status, student/family contacts, workloads, parent satisfaction, student promotion and retention, escalation, state test results, graduation rates, teacher evaluations; assisting and monitoring school performance on authorizer and/or state rating systems and assisting with developing improvement plans.
- Support and professional growth for the school leader and school administrative team.
- Responsibility for all activities required for the certificate renewal process, including development of all related documentation, as well all required or recommended certificate amendments
- Responsibility for all aspects of the school's accreditation process if the school seeks accreditation from a third-party accrediting body such as AdvancedEd, as well as obtaining NCAA approval of TECCA courses.

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[22] The amended contract was subsequently approved by the Commissioner on November 13, 2016.

- Creation, editing, revision and management of the approval process for school handbooks, including compliance with all related regulatory or authorizer requirements, as well as related TECCA board directives.
- Responsibility for developing and implementing a state testing plan.
- Responsibility for all aspects of identifying and pursuing all grant, as well as all Federal funding opportunities, including, but not limited to, drafting and reviewing applications, tracking expenses and submission support, and tracking and reporting on compliance requirements
- Responsibility for identifying and procuring at TECCA's sole expense all required and desired insurance coverage, including property, casualty, Directors and Officers, and employment-related insurance coverage.
- Identification, documentation, tracking and monitoring of key regulatory, operational, and financial risks; monitor compliance with contractual requirements outlined in the certificate as well as applicable federal and state laws and regulations.
- Responding to all Student and public records requests, as well as subpoenas.

Further, CE agreed to waive its right to receive repayment of credits issued to the school during the certificate term, which is notable because in the initial two years of TECCA's certificate term, CE provided TECCA with fiscal support to bridge the gap between projected and actual enrollment.

Per the TECCA board, by reducing services provided by CE, TECCA has been able to add this funding to the per pupil formula, and, thus, TECCA's class size ratio is lower than any CE-supported school across the country.

8. Governance

Rating: Partially meets

While the TECCA board monitors the school's progress toward meeting academic and other goals, the board has not yet established clear processes for board and school leadership succession and regular self-evaluation based on established annual goals or a plan.

At the time of the review, the TECCA board was comprised of seven members, including a parent of two virtual school students. The chair is the superintendent of the Natick Public Schools, and the board's membership includes representatives from the public and private sector, all with a background in educational technology. There has been little turnover in the group over the course of the school's initial certificate.

The board reviews monthly reports, parental involvement information and survey results, to monitor the school's progress toward its established priorities and goals. While the board looks at the data, members indicated that it is "secondary to actually hearing what goes on." To that end, for the second year, TECCA teachers are invited to attend monthly board meetings to offer their perspectives and give specific instances of how they have reached out to students and achieved success. The board praises commended the school leader for how he uses data and works with staff to improve. The leadership team reported that the board is supportive of the direction of the school and its mission to build an innovative program that meets diverse student needs.

The board evaluates the school leader on a two-year plan that includes a professional practice goal, a student learning goal, and two district-determined measures. A mid-year review, scheduled for the spring of 2017, will be based on input from the board and CE. In terms of professional development, the board directed the school leader to participate in certain workshops; in addition, the school leader has a mentor through Massachusetts Association of School Superintendents.

There is no formal performance-based evaluation process for regularly evaluating itself based on accomplishing annual goals and/or a strategic plan; rather, they rely upon feedback from the school leader and discuss their own goals at the end of the year.

9. Finance

Rating: Meets

TECCA operates in a financially sound manner.

The board voted to accept the school's FY2015 financial audit on December 17, 2015 and subsequently submitted it to ESE before January 1, 2016 as required by statute. The audit, conducted by [Borgatti Harrison & Co.](), found that TECCA operated in accordance with the Governmental Accounting Standards Board (GASB) and did not identify any deficiencies in internal control that it considered to be material weaknesses or significant deficiencies.

TECCA's certificate permits an enrollment of 2,000 students in 2017-17, and per ESE's request, the school continues to provide ESE with weekly staffing and enrollment updates.

Board meeting packets shared with ESE as part of their meeting notification process indicate that it reviews the school's finances monthly.

In light of ongoing concerns about staffing and the growing number of students with special needs[23], and as noted in the February 2016 accountability review, TECCA has been assessing the adequacy of the per pupil capitation[24] it receives from the state. With input from the state's Digital Learning Advisory Council (DLAC), TECCA prepared a proposal for an increase in per pupil funding. At its November 4, 2016 meeting the DLAC recommended that BESE consider TECCA's proposal for a rate increase up the maximum requested, with the expectation of full transparency in reporting with respect to financials, student outcomes, and governance.

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[23] Excerpted from the TECCA proposal for an increased per pupil capitation reviewed by the DLAC, "Special education and Section 504 students comprise over 30% of our total student population (approximately 170 IEP's and 80 504 Plans) and both groups represent significant personalized needs. Further, Special Education has increased 81%, and Section 504 has increased 50% from this time last school year."

[24] TECCA's regular education per pupil allocation of $6,700 was established by the Board of Elementary and Secondary Education in the school's terms of certificate. An adjustment to the per pupil allocation must be approved by BESE.

Appendix A: Expected practices

Prior to conducting observations of online lessons, ESE requested and received descriptions of expected practices aligned to ESE's criteria for classroom culture and management and quality instruction.

Classroom culture and management	
Description (ESE)	**Expected practice (CMVS)**
Classroom climate is characterized by clear routines, respectful relationships, behaviors, tones, and discourse	• Introduce lesson to focus students' attention. • Acknowledges and greets students as they enter the room. • Ensure comments are clear, accurate and related to the lesson. • Keep students on task throughout the lesson. • Post classroom rules/expectations of LiveLesson behavior and participation.
Learning time is maximized for all students	• Begin lesson at the scheduled time. • Keep students on task throughout the lesson.
Classroom practices foster student engagement	• Use LiveLesson® Technology to effectively manage class activities (granting entry, clearing chat pod, properly closing meeting, etc.) • Utilize tools within (Breakout Rooms, Chat pod, Poll Pod, Student Microphone, Share Pod, etc.) • Encourage students' active participation in their own learning through the entire lesson. • Encourage student collaboration. • Prepare an opening activity (MAY be a warm-up MCAS question; opening/general question) and have it ready for the students to complete while they wait for class to begin.
Quality Instruction	
Instructional practices are consistent with the school's expected practice	• Respond to student comments and questions completely and appropriately. • Livelesson has key/answer question that students enter in LL Attendance Dataview.
Instruction/activities challenge all students to develop and use higher order thinking (analyzing, creating, evaluating)	• Implements strategic questioning that encourages students' higher order thinking using depth of knowledge strategies. • Providing opportunities for all students to participate (pulse-checks).
Teacher uses various checks for understanding throughout the lesson	• Collect data during the lesson (poll pods, Q & A, etc.) to determine if all students are achieving lesson objective(s).
Instruction provides skill/content that are aligned to grade-level standards and/or students' educational needs	• Provide clear learning objectives/standard for the lesson.
Activities/materials/strategies are differentiated to provide	• Review students' prior knowledge related to the lesson's objectives.

Classroom culture and management	
Description (ESE)	**Expected practice (CMVS)**
support for all learners	• Utilize a variety of strategies such as KWL or Venn Diagrams, poll pods, open ended questions. • Employ a variety of learning resources such as video, manipulatives, and visual to differentiate instruction. • Use of gradual release strategies - "Demonstration of I do, we do, you do."
Sheltered English immersion: Instructional content in the English language is sheltered	• Use of scaffolding techniques to address language and content objectives. • Use of the Q & A pod, private messaging to prompt students and provide support (this would not be observable to a participant), and use of small group break out rooms.
Students with disabilities: To extent observable, students with disabilities are provided with the appropriate assistive technologies, accommodations, supports, adaptations and related services	• SWD classrooms can be both small groups and inclusion sessions. • Assistive Technology: This would not be readily observable during a LL. The only AT that could be observed would be closed captioning or sign language interpreting. We have these services available, but no students currently utilize them at TECCA. • Accommodations, Supports and Adaptations: Use of the Q & A pod, private messaging to prompt students and provide support (this would not be observable to a participant), and use of small group break out rooms. • Related Services: Related services are offered, but would not be observable in a LL room.

Appendix B: TECCA annual goals, 2014-16[25]

A. Academic success

1. Officially Reported State Test Results: All official published state test proficiency rates for the school will meet or exceed the Massachusetts state average. The calculation is a ratio of the school's result to the state average for each tested subject-grade level. Each ratio is capped at 1.00, and a weighted average computed based on the number of tests taken by students.

2. Academic Growth: 90% of returning students' (enrolled for state testing last school year and this school year) state test scores will indicate proficiency or better, or will show improvement of at least one category in 4th through 8th grade Reading and Math (e.g., from "Warning/Failing" to "Needs Improvement"). Reading and Math will be calculated separately and averaged. The Student Growth Percentile (SGP) will demonstrate moderate growth for the aggregate number of students in each grade.

3. AP® Exam Performance: Student performance will meet or exceed the MA state average, as measured by the percent of the senior class with one or more scores of 3 or above (or other measure as officially reported for MA).

B. Organizational viability

TECCA focus goals emphasize student achievement and are used to award performance bonuses to school staff. In addition, the school has basic operational goals of improved performance on the state's accountability system; being fiscally, legally, and operationally responsible; and attracting, retaining, and satisfying parents, students, and teachers.

1. School financials are healthy as reported in the Annual Fiscal and Independent Audit reports: No material audit findings, and positive fund balance.

2. Retention of qualified, effective teachers: 90% retention rate for teachers rated proficient or exemplary in accordance with the MA Educator Evaluation model.

3. Parent satisfaction - school community is positive and strong as shown by parents expressing satisfaction on the annual independent survey: School's positive responses on the 21 Parent Satisfaction Survey questions that are most directly affected by the school will average 80% or higher.

C. Faithfulness to mission

1. Student Retention: The school will have a 65% "during school year" retention rate, as reported in the June 30 Monthly School Report (MSR).

2. Promotion: 85% of full academic year students will promote to the next grade (K-8) or earn at least one fourth of the required HS credits for a standard diploma in the school year (grades 9-11). This will be assessed as of the end of the school year as compared with the beginning of the school year.

3. Graduation and Post-Secondary Plans: 80% of full academic year 12th graders will graduate. Graduates will be accepted to one or more post-secondary options (2 or 4-year college, accredited vocational school, and/or military service branch), based on the students' Post-Graduation Plans.

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[25] Excerpted from TECCA's application for certificate, submitted to ESE in November 2013. The application to operate a Commonwealth Virtual School requires that the applicant provide three examples of accountability plan objectives for each of the following areas: academic success, organizational viability, and faithfulness to mission. These objectives should be rigorous, measurable, outcome-based, and focused on core school priorities. *Revised accountability goals were approved by TECCA board on November 3, 2016; however, these goals were presented to ESE after the renewal inspection, and at the time of this writing these goals have not been approved by the Commissioner.*