

**CASE STUDY ON IMPACT OF RBT PROGRAMS:
GREATER LAWRENCE TECHNICAL SCHOOL
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Since 2011, Research for Better Teaching (RBT) has worked with the Greater Lawrence Technical School (GLTS) offering courses for teachers and administrators and provide additional consultation. This case study summarizes RBT activities conducted at GLTS and describes the impact of those activities on students, teachers, and administrators in the school.

Overview of Greater Lawrence Technical School¹

GLTS is one of 26 regional vocational and technical high schools in Massachusetts. It serves the four communities of Andover, Lawrence, Methuen, and North Andover and is in Andover. During the 2015-16 school year, GLTS enrolled over 1400 students. This made it the 6th largest regional vocational school in Massachusetts. The school experienced a 15% increase in enrollment compared to the 2010-11 school year. This enrollment increase was considerably greater than the increase experienced by Massachusetts regional vocational school generally over that time (1.3%).

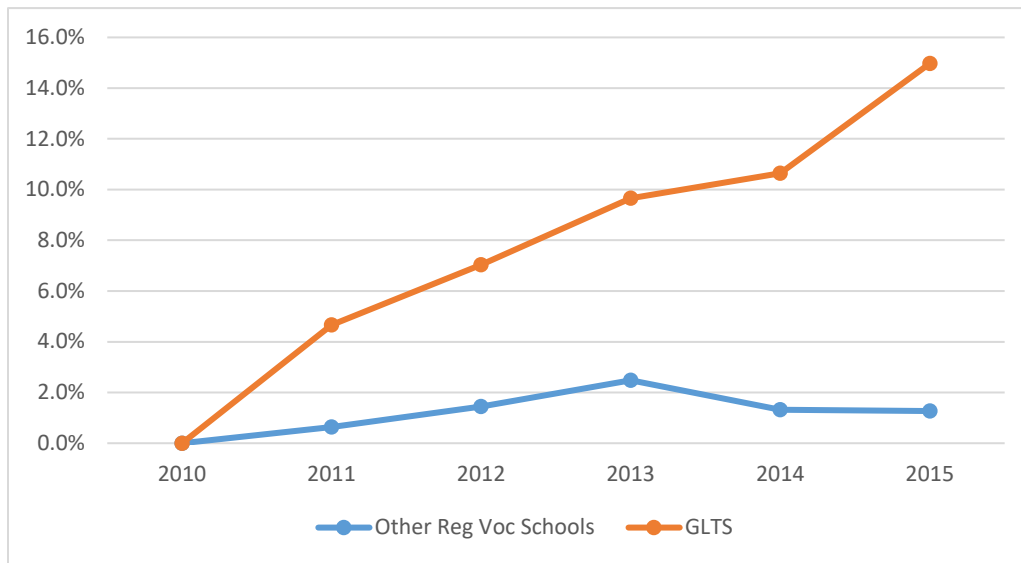


Figure 1. Annual Student Enrollment Compared to 2009 School Year

Currently, 79% of GLTS students are Latino and 18% are white. This compares to all other Massachusetts regional vocational schools where 77% are white, 13% are Latino, 5% are African-American, and 2% are Asian. The racial/ethnic composition of GLTS has been consistent during the entire time that RBT has worked in the school.

¹ Enrollment data in this section is drawn from public data on the Massachusetts Department of Elementary and Secondary Education website.

Given the racial/ethnic composition of the GLTS student population, it is no surprise that the proportion of students whose first language was not English is several times higher in GLTS than all other Massachusetts regional vocational schools (33% vs. 8.3% in 2015). Similarly, the percentage of English Language Learners at GLTS is much greater than all other Massachusetts regional vocational schools (9.6% vs. 1.2% in 2015). Finally, the proportion of GLTS students who were considered Economically Disadvantaged was almost twice the rate as in all other Massachusetts regional vocational schools (47.8% vs. 25.7% in 2015). Again, these patterns have been consistent throughout the period of time when RBT has worked at GLTS.

Like other vocational school students, GLTS students spend almost half of their educational time learning technical skills and knowledge in a career path that will prepare them for employment after graduation. All GLTS vocational education programs are approved Chapter 74 programs from the Massachusetts Department of Elementary and Secondary Education (DESE). The curriculum associated with these programs have been aligned with the Massachusetts vocational education framework. Students enrolled in these vocational education programs are expected to attain a Certificate of Proficiency in their chosen program prior to graduation.

All Massachusetts regional vocational schools are considered school districts by the state and operate independently of all other school districts. The Greater Lawrence Technical School District is led by a Superintendent of Schools (John Lavoie) while the Greater Lawrence Technical School is led by its principal (Elizabeth Freedman).

The school has articulated the following philosophy on its website:

“GLTS believes that its fundamental function is to develop each individual student to his/her highest potential. Students are entitled to an education in a supportive learning environment by highly qualified teachers who take advantage of current research in education, provide productive learning experiences and promote academic and technical excellence. GLTS fosters a sense of individual empowerment, tempered by respect and responsibility. Each student shall be provided opportunities to gain the skills necessary to function in diverse society, to develop personal and professional ethics, and to meet the challenges of higher education and an evolving workforce.”

Description of RBT Program²

Research for Better Teaching began to work with Greater Lawrence Technical School during the summer of 2011 when it offered its *Studying Skillful Teaching* (SST) course specifically for GLTS teachers. According to the GLTS Superintendent:

“I had taken RBT courses when I first started in administration in another school and they had a huge impact on my capacity in observation and feedback. I heard the same thing from many of my colleagues. I concluded that RBT was a training organization that you could trust and believe.”

² Information in this section was drawn from interviews with: John Lavoie, GLTS Superintendent; Elizabeth Freedman, GLTS Principal; Beverly Ross Denny, RBT Chief Operating Officer; Janice Burris, RBT trainer for the SST course; and Robin Whitacre, RBT trainer for the FAR course. Data was also drawn from RBT course enrolment records.

The GLTS Principal echoed these comments. She reported that she too had completed RBT courses while working in other districts. She found them to be “high-quality and valuable” to herself and other teachers and administrators. When she joined GLTS, she and the Superintendent realized that the RBT courses aligned with their educational philosophy and their planned school improvement efforts.

These previous experiences convinced the two lead administrators at GLTS to bring RBT to the school prior to the 2011-12 school year. The Superintendent listed the purposes for adopting the RBT courses as:

“Promoting consistency in the language of instruction used in the school. Ensuring that administrators were confident and skilled evaluators of teaching. Ensuring consistency in teacher evaluation observations and feedback so that teachers could have trust and belief in the new teacher evaluation system and process.”

RBT was asked to offer two courses at GLTS: its teacher course (*Studying Skillful Teaching*) and its administrator course (*Analyzing Teaching for Student Results*).

Teacher Course. *Studying Skillful Teaching* was developed by RBT to help teachers build their capacity to improve their practices and their students’ achievement, develop common language and conceptual frameworks about teaching, and strengthen the adult professional culture in the schools. RBT has offered the SST course specifically for GLTS teachers each summer beginning in 2011. According to the RBT consultant who has conducted the course each year (Janice Burris), the course has consistently addressed the following topics:

- Understanding and embracing the growth mindset
- Writing measurable objectives for lessons
- Communicating criteria for success to students
- Developing and using formative assessments
- Understanding culturally-responsive practices
- Using cooperative learning structures and activities

Burris noted that embracing the growth mindset was a particularly strong priority of the GTLS leadership and was consistently emphasized in discussions and other professional development activities offered by the school. This was confirmed by the GLTS Superintendent and Principal.

Burris reported that some adaptations had been made in the SST course for the specific audience (GLTS teachers). Examples cited in the course were solely taken from other high schools. In addition, some of the assignments which participating teachers were required to complete were adapted to be relevant for both vocational and academic teachers.

The GLTS Superintendent and Principal reported that all new teachers hired by the district were required to complete the SST course within their first three years of employment. Enrollment in the course was voluntary for veteran teachers at GLTS. However, some veteran teachers had been strongly encouraged to enroll in the course as part of their professional growth plan.

The RBT course enrollment database indicated that the number of participants taking the annual SST course varied from a low of 16 to a high of 27. Some of the courses (in 2013 and 2014) also included a small number of staff from two other regional vocational schools (Minuteman and Greater Lowell). Through the summer of 2015, 95 GLTS staff participated in the SST course (2 took the course twice) with 73 (77%) still at GLTS during the 2015-16 school year.

Table 1. SST Enrollment by GLTS Staffing Categories

Category	Staff Completing SST	Percentage of 2015-16 Staff
Vocational Teachers	34	57%
Academic Teachers	22	48%
Special Education Teachers	9	41%
Physical Education Teachers	2	40%
Guidance Staff	1	11%
Administrators	5	31%

These figures represent the GLTS staff that have taken the SST course while they were working at GLTS. According to the GLTS leadership, some administrators and teachers took the SST course while working for another school district. In addition, the GLTS Principal reported that veteran teachers who have not taken the course were exposed to some of its concepts and language through other professional development activities offered by GLTS, particularly concepts related to the growth mindset, writing measurable objectives, and culturally-responsive practices.

Administrator Course. *Analyzing Teaching for Student Results (ATSR)* was developed by RBT to expand administrators' capacity to influence the quality of teaching and improve student performance. The course accomplished this by helping administrators understand and recognize what is critical to effective student learning, how to analyze teachers' classroom decisions and actions, how to communicate better about teaching, and how to provide strategic leadership to improve teaching and learning. The course also provided administrators a framework for communicating their observations and conclusions, the CEIJ format (Claims-Evidence-Interpretation-Judgment).

The GLTS Principal reported that all GLTS administrators have taken the ATSR course. The RBT course enrollment data indicated that 7 GLTS administrators have taken an open enrollment ATSR course since coming to GLTS. The other administrators took the ATSR while working at another district (like the GLTS Superintendent and Principal).

Other Services. During 2015, GLTS contracted with RBT to offer the *Formative Assessment for Results (FAR)* course to a group of GLTS administrators and teachers. This course was developed by RBT for school staff who were facilitating or leading teacher teams. It sought to strengthen the operation, focus, and effectiveness of teacher teams and increase the use of formative assessment as a tool for improving teaching and increasing student achievement. The course presented a four-step cycle that allows teacher teams to actively engage students with learning targets and success criteria, infuse formative assessment into daily instruction, analyze results, and take collective, informed, and inspired action in response to formative assessment data based on student needs.

Prior to conducting the course, the RBT consultant (Robin Whitacre) met for 3 days in May 2015 with a 20-person leadership team from GLTS (including the Superintendent and Principal) to discuss the course as well as the goals, priorities, and needs of the school. According to Whitacre, the school's interest in the FAR course was motivated by their desire to make the teacher team meetings more effective by encouraging greater emphasis on instruction and student assessment. Because of these meetings and subsequent phone conversations, Whitacre reported that adaptations were made in the language and materials used in the course to ensure consistency with the language already being used by the school and to align course concepts with school goals, priorities, and improvement plans.

The course was conducted over a 5-day period in August 2015 with a follow-up session in October 2015. Whitacre reported that her presentations and discussions with participants during these sessions sought to emphasize that the FAR cycle was designed to support existing school initiatives rather than serve as a new initiative. Emphasis was also placed on the FAR cycle, as well as strategies and materials presented during the FAR course, should serve as "tools not rules" for participants to use with their teams.

After the October 2015 session, the school continued to convene monthly meetings of the administrators and teacher who participated in the FAR course to debrief and support their work in leading teacher teams. These meetings were facilitated by the GLTS Principal and other members of the school leadership team.

RBT course enrollment records indicated that 47 GLTS staff were enrolled in the FAR course during 2015. This included:

- 19 vocational education teachers
- 15 academic teachers
- 3 special education teachers
- 1 guidance staff
- 7 administrators (including the GLTS Principal)

Whitacre reported that the GLTS Superintendent also was a regular participant in the FAR sessions even though he was formally enrolled in the course. She noted that the consistent participation by both the GLTS Superintendent and Principal in the session helped convey the importance of the FAR course to the other participants.

In addition to the three sets of courses, RBT records indicate that two types of consultation were also provided by RBT to GLTS. Jon Saphier, Founder and President of RBT, provide limited consultation during one year to support the school's implementation of a new teacher evaluation system. Debra Munk, RBT consultant, provided consultation around team-building to the GLTS Principal and the school leadership team.

Assessment of RBT Program³

The GLTS Superintendent and Principal both characterized feedback from teachers and administrators about the RBT courses as “mostly positive.” According to these two school leaders, teachers reported finding the SST course useful and applicable to instructing students. They heard positive responses to the SST course from both academic and vocational teachers. The Superintendent noted that “the SST course was appropriate across disciplines and to both academic and vocational teachers because it was about teaching and instruction rather than content.”

The experiences reported by the 10 GLTS administrators and teacher-leaders interviewed for this report were consistent with the characterizations and conclusions of the GLTS Superintendent and Principal. These 10 GLTS reported taking a total of 20 RBT courses either before or during their tenure at GLTS. Overall, 15 of the 20 courses (75%) were characterized by the GLTS staff in positive terms including all 3 taking the SST course, 5 of the 7 taking the ATSR course and 7 of the 10 taking the FAR course.

The SST course for teachers was characterized as “excellent” and “definitely valuable.” A third GLTS staff member said that “I loved that course. I can’t speak highly enough about its value to me when I was a new teacher.” She went on to report that “the work assigned after each session was immediately relevant to my classroom. You could use your own content but apply their strategies.” This observation was echoed by the other two GLTS staff in their interviews.

In commenting on the ATSR course for administrators, one GLTS administrator reported that “the structure of the course and the learning that took place were very good and impactful. Its content was rock-solid, practical, and useful. It hit most of the key moves that supervisors need to learn to be effective.” Other administrators emphasized that they learned to “make accurate observations and provide actionable feedback to teachers” through this course. Another administrator said that “the resources provided by the course are very unique and absolutely invaluable. I have the notebook and binder on my desk right now and I use them multiple times during the day.”

The FAR course was characterized by participants as “outstanding”, “great” and “invaluable.” Several participants emphasized the importance of course adaptations made by the course trainer:

- *“The instructor made a major commitment to adapt the course to a vocational setting. She changed her terminology and made connections for the staff. That strengthened the buy-in of school staff because it was connected to what we already did.”*
- *“The instructor really listened to us. She learned about how the school operated and really adjusted to make the course ours.”*
- *“The instructor focused on course participants as ‘customers’ and continuously changed what she did in response. That made a big difference. It made the course much more meaningful.”*

³ Information in this section and the next section was collected through interviews conducted in February and March 2016 with 12 GLTS administrators and teacher-leaders including the GLTS Superintendent and Principal. These sections also incorporated responses from an online survey administered in March 2016 and completed by 59 GLTS staff, including 21 vocational teachers, 24 academic teachers, 9 administrators, and 5 other staff.

Several participants also highlighted the value of the materials used in the course in their comments. One of the participants reported that the “quality of materials and underlying concepts of the course were very good and well thought-out.” Another characterized the materials as “outstanding” and “very useful.” At the same time, participants concluded that “there was so much material presented in the course that we are still at the beginning of processing it all and figuring out how to use it with our teams.” Nevertheless, participants noted that they were able to “use the FAR protocols and processes right away in our common planning time.”

Participant assessment results of the three RBT courses from the online GLTS staff survey also were consistent with the interview comments from GLTS administrators and teacher-leaders.

Staff were asked to assess the immediate relevance of the course to their classroom practices (for the SST course), teacher supervision (for the ATSR course), and use of common planning time (for the FAR course). Figure 2 indicates that a substantial majority of the participants in each course agreed that course content was immediately relevant.

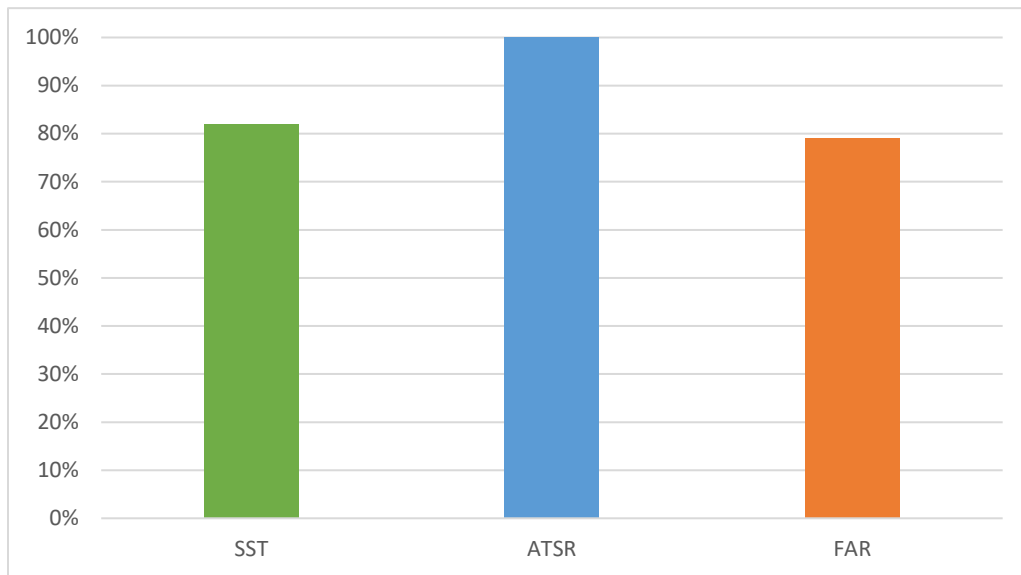


Figure 2. Percentage Agreeing on Immediate Relevance of RBT Course

To assess the value of the resources distributed in each course, staff were asked whether they continued to refer these materials in their work. A substantial majority of participants in each course agreed with that statement (see Figure 3).

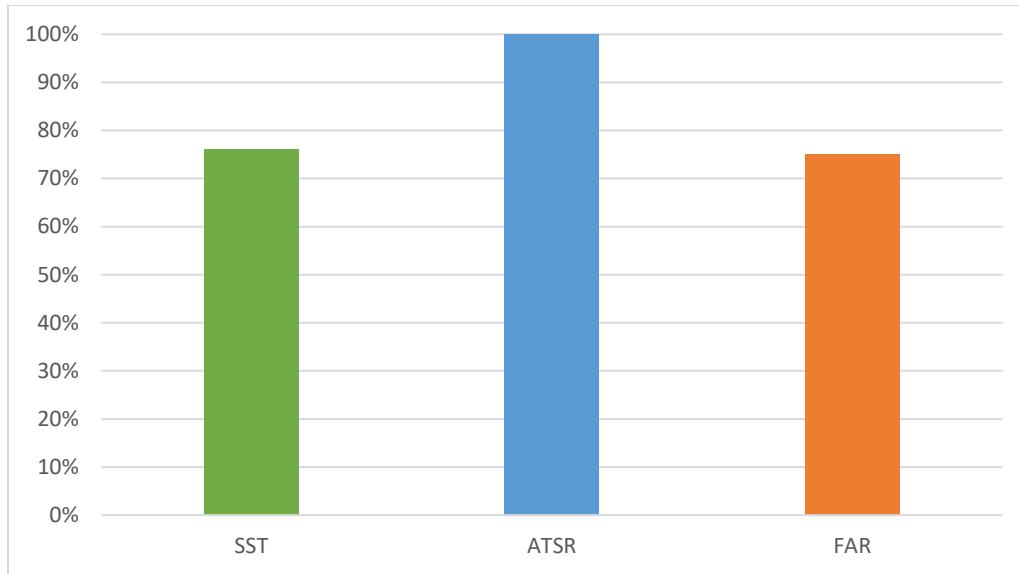


Figure 3 Percentage Agreeing on Continued Use of RBT Course Materials

Finally, GLTS staff were asked to assess the “overall quality and value” of each course. Approximately 60% of the participants in each course rated it as high or very high (see Figure 4).

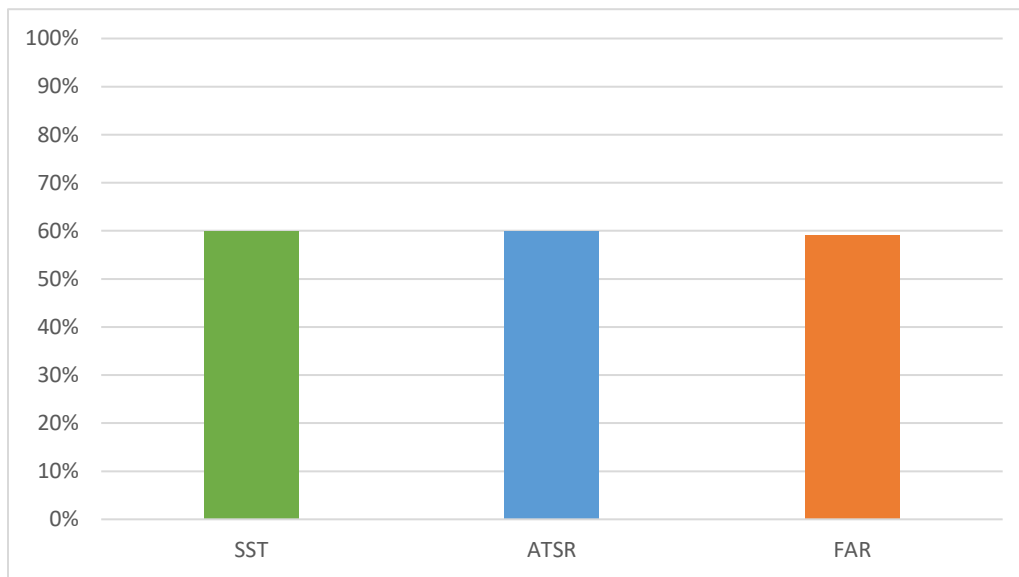


Figure 4 Percentage Rating Quality & Value of Course as High/Very High

A comparison of the survey responses between academic and vocational staff revealed only small differences (5% or less) in their assessment of both the SST and ATSR courses. However, there were larger differences (about 15-20%) between the two groups in their assessment of the FAR courses – with vocational teachers having a consistently more positive assessment of the course than academic teachers (see Table 2).

Table 2. Percentage of GLTS Staff Responding Agree/Strongly Agree or High/Very High

	Survey Item	Academic Staff	Vocational Staff
SST	Immediate Relevancy	81%	82%
	Continued Use of Materials	73%	78%
	Overall Quality & Value	59%	61%
ATSR	Immediate Relevancy	100%	100%
	Continued Use of Materials	100%	100%
	Overall Quality & Value	60%	60%
FAR	Immediate Relevancy	67%	87%
	Continued Use of Materials	67%	83%
	Overall Quality & Value	52%	67%

The survey also asked GLTS staff to share general comments about their experiences with the RBT courses. Both academic and vocational teachers shared comments that were like those made by GLTS administrators and teacher-leaders during the phone interviews. One academic teacher wrote: “I though the RBT course was great. Even as a teacher of ten years, I was able to take a lot away. I wish that more teachers would take it.” A vocational teacher was equally enthusiastic: “I think the RBT classes were worthwhile and the instructor was very good. I agree with the school’s policy that this course is a requirement for all new teachers – vocational as well as academic.”

Impact of RBT Program

Teaching Practices. The GLTS Superintendent and Principal both reported improvement in the quality of instruction among both academic and vocational teachers as a result of the RBT courses. They also observed greater consistency across all classrooms in the school regarding instruction and teaching practices. They concluded that the emphasis on the growth mindset and culturally responsive practices by the RBT courses along with professional development activities offered by GLTS had contributed to staff progress in both areas. According to the Superintendent, “we are farther along than we were when we started this effort but we still need more development. We need to be sure that staff behavior in the school consistently demonstrates our stated belief in both areas.”

Most of the administrators and teacher-leaders interviewed for this report (8 to 10) reported that GLTS teachers generally adopted teaching concepts and practices presented in the SST course and that RBT courses had contributed to improved teaching practices in the school. One vocational administrator reported that she “absolutely sees vocational teachers adopting practices from the RBT course.” Another noted that he “does see some new teachers utilizing some of the techniques they learned [in the course], but others experience a learning curve where they pick some of that up over a longer period of time.” An academic administrator concluded that “the RBT course has changed the mindset of teachers in this school and also has provided them new skills and strategies to use in their classrooms. It has created a positive shift in how they teach.”

Many of the administrators and teacher-leaders (6 of 10) agreed with the Superintendent and Principal that emphasis on the growth mindset in the RBT courses and GLTS professional development had a positive impact on teaching in the school. One vocational administrator estimated that “75% of the teachers taking the RBT course have embraced the growth mindset.” To demonstrate the broad embrace of the growth mindset in the school, a teacher-leaders said

that her students reported hearing about the growth mindset from most of their teachers. Because they heard about it so often, the students concluded that it “must be important.”

Beyond the growth mindset, individuals identified other areas of changes in teacher practices at GLTS that they linked to the RBT courses:

- *“The two areas that had the biggest change were student engagement and differentiation. In student engagement, I saw lots more student-led learning and student collaboration. There was lots more inquiry and lots less of teachers delivering content. I’ve also started seeing gains in use of formative assessments due to the FAR course.” Reported by academic administrator.*
- *“I’ve seen some big changes in teachers’ expectations of students. In fact, I had one veteran teacher who was really struggling with expectations, so I suggested he take the RBT course. The course made a big difference for him. He told me and other teachers that he wished he had taken the course 15 years ago.” Reported by vocational administrator.*
- *“Cultural proficiency is an important area and one where schools really need work. The RBT courses are making a difference for our school in that area. After taking SST, one teacher came up to me and said that she now recognizes that the language she’s used in tests were culturally-biased and that she wanted help in changing that.” Reported by teacher-leader.*

The online survey asked GLTS staff to assess the impact of the SST course on five types of teaching practices that were identified as a focus for the course (see page 3 of the report). As Figure 5 indicates, “communicating criteria for success to students” and “writing measurable learning objectives” were areas identified by most teachers where the SST course had a high or very high impact. Figure 6 compares the responses of academic and vocational teachers at GLTS. A greater proportion of academic teachers reported high/very high impact in all five areas. The difference between academic and vocational teachers was particularly large (34%) regarding the use of formative assessments and particularly small regarding use of culturally responsive practices (9%). Differences for the other three areas ranged from 15% to 17%.

The survey also asked GLTS staff about the impact of the course on helping them to “understand and embrace a growth mindset.” Almost all GLTS staff (94%) agreed that the SST course had accomplished that. Moreover, responses from GLTS academic and vocational teachers were almost identical (only 1% difference). This result generally confirms the interview observations of the GLTS Superintendent, Principal, administrators, and teacher-leaders.

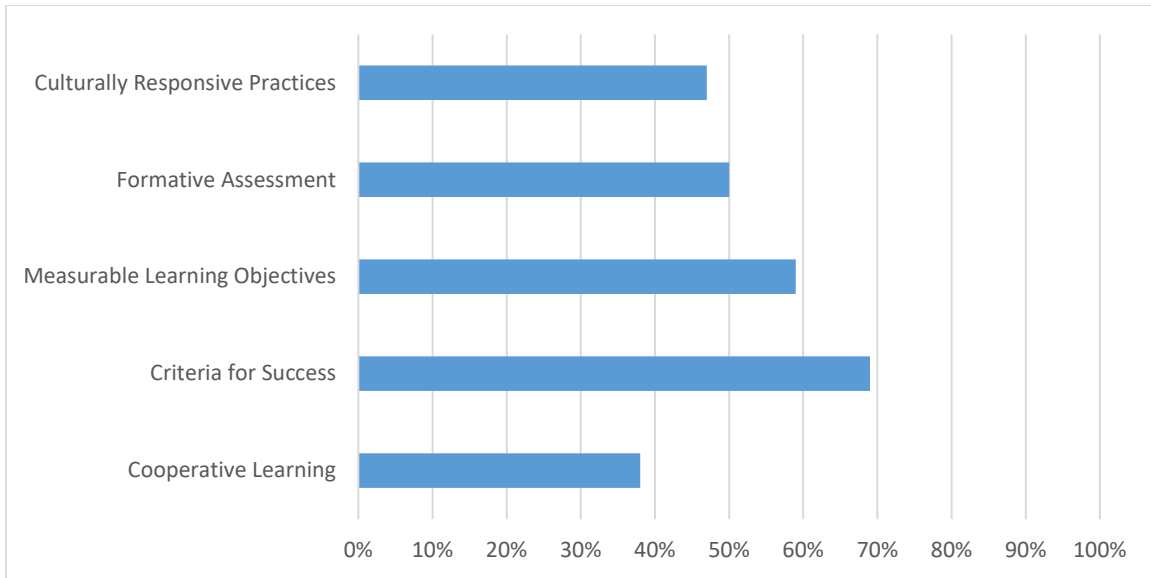


Figure 5. Percentage of GLTS Staff Reporting High/Very High Impact of SST Course on Specific Teaching Practices

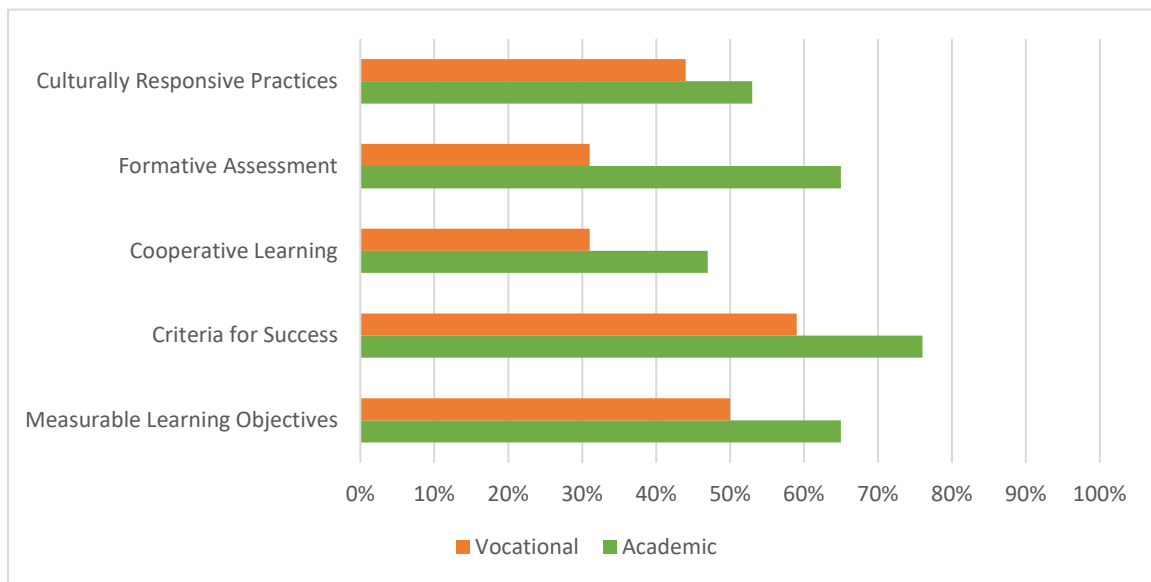


Figure 6. Percentage of GLTS Academic & Vocational Staff Reporting High/Very High Impact of SST Course on Specific Teaching Practices

Supervision of Teachers. In their interviews for this report, the GLTS Superintendent, Principal, and the 6 administrators who took the ATSR course (or its equivalent) from RBT all agreed that the course contributed to the success of new evaluation system adopted by the school. The Superintendent specifically noted that he had observed growth among GLTS administrators and teachers in their practice and attributed that growth to the RBT course and the new evaluation system.

One academic administrator specifically described the positive impact of the course and new evaluation system: “It has created very productive conversations by administrators with the teachers. It has also allowed us to clarify our observations and provide very good feedback. The

course provided us excellent tools and aligned well with our new supervision system.” A vocational administrator reported that “being able to give good, actionable feedback was something he learned in the ATSR course. Giving that kind of feedback is something his teachers appreciate.” The Superintendent came to a similar conclusion reporting that there was “much more clarity and accuracy in evaluator write-ups” due administrator completion of the RBT course.

A substantial majority of the administrators interviewed (5 of 6) reported that the CEIJ framework presented in the ATSR course was closely aligned with the new GLTS evaluation system and could be used with minimal adjustments. Only one vocational administrator reported the need to make more substantial modifications to the framework before it could be used with the new system.

Results from the online survey related to the impact of the ATSR course were consistent with administrator comments during the interviews. A substantial majority of the administrators who had taken the ATSR course (7 of 9) rated the impact of that course as high or very high on all four practices related to teacher supervision (classroom observation, providing feedback to teachers, documenting observations and conclusions, providing guidance to teachers).

The school leaders and the administrators interviewed reported that GLTS to maintain consistency in the use of the CEIJ framework. Administrators regularly conducted joint observations and share their write-ups. Regular meetings are conducted every other week among the school’s administrators to review and discuss the write-ups, often focusing on specific elements that may be issues of group concern. The administrators reported that these efforts help ensure that they are all “on the same page.”

Use of Common Planning Time

As noted earlier in this report, the FAR course was implemented at GLTS in 2015, four years after implementation of the SST and ATSR courses began. One of the major purposes of the FAR course was to improve the productivity of the mandated common planning time meetings conducted regularly by teams of GLTS teachers throughout the school year. According to the GLTS Superintendent and Principal, common planning time had been in place at the school for 5 years prior to the FAR course. The expectation was that this time would be used by teachers to develop curriculum, develop assessments, and look at student work. Instead, the quality of use of this time was very inconsistent among different teams of teachers and even among different meetings of the same team of teachers. However, there was a broad consensus among the school leaders, administrators, and teacher-leaders that the FAR course had already begun to improve the quality of common planning time meetings in the school. In large part, this was because the information presented had been adapted to the school and had an immediate and practical application to the team meetings.

GLTS administrators and teacher-leaders interviewed for this report described the specific impact of the FAR course on common planning time meetings they facilitated or observed:

- *“Until the FAR course, you’d read the minutes of meetings and it would be very anecdotal. There was no analysis or discussion of data. The FAR course refocused*

everyone. Teachers look at student outcomes and discuss how to improve what you're doing to improve results. Now they're making unit decisions using data rather than just talking about a single lesson plan. There's more conflict and tension but it's positive because they're debating things and drawing on MCAS results to drive decisions."

- *"The quality and effectiveness of the teams have been improved by the FAR course. Before the teams didn't have an agenda. Teachers were often just complaining or talking about individual students. Now we've incorporated much more structure. It's very powerful for the teams. We doing learning together. We're able to share practices and make changes in our teaching plans."*
- *"Meeting is being used in much more effective and different ways. Teachers are looking at the 'meta' level of the curriculum. Rather than talking about specific students, they looking at the whole group of students. There's much more 'big picture' talk which allows greater support for long-term and major growth in the quality of instruction. Much of the previous work was very specific to individual students and the current lessons."*
- *"The FAR course has made common planning time more productive and made our group more cohesive. It also changed how many people act in the meetings. Some teachers have actually admitted that they had written culturally-biased tests and talked about making changes. One teacher who never volunteered in the past is doing so now. She's sharing information she collected in her outside research and is eager to show the changes she's made this year."*

Although there have been broad gains in the quality of the common planning time meetings, the RBT trainer observed that teams remain at different stages of development and operation based on the results of their assignments and the discussions during the October session. In fact, she encouraged flexibility in the use of the FAR cycle and protocols by participants and teams to support their own developmental process and that of their teams. This approach explicitly recognized that individuals and teams were starting at different places both in their operation as teams and in their use of formative assessments – so they would need to follow different paths in their development.

This conclusion was echoed by one of the FAR course participants who reported observing many of the common planning time teams (12) in the course of her work. She observed one team that was already relatively high-functioning begin to use the FAR tool at a relatively high level. They were collecting formative data, analyzing that data, and making adjustments in their instruction based on the data. She reported that most of the teams she observed were using only one or two elements of the FAR cycle and protocols but were doing so seriously and effectively – and were making greater use of data in the process. Moreover, most of these teams were moving in a positive direction to make greater use of the FAR tools and formative assessments. Two administrators who reported observing 3 or 4 teams also concluded that “different teams were at different places” after the FAR course but all were on a “positive trajectory” leading to further improvement.

The online survey asked GLTS staff to assess the impact of the FAR course on the effectiveness of common planning time meetings. A substantial majority of staff reported a high or very high impact – with a greater proportion of vocational teachers reporting such a result (see Figure 7).

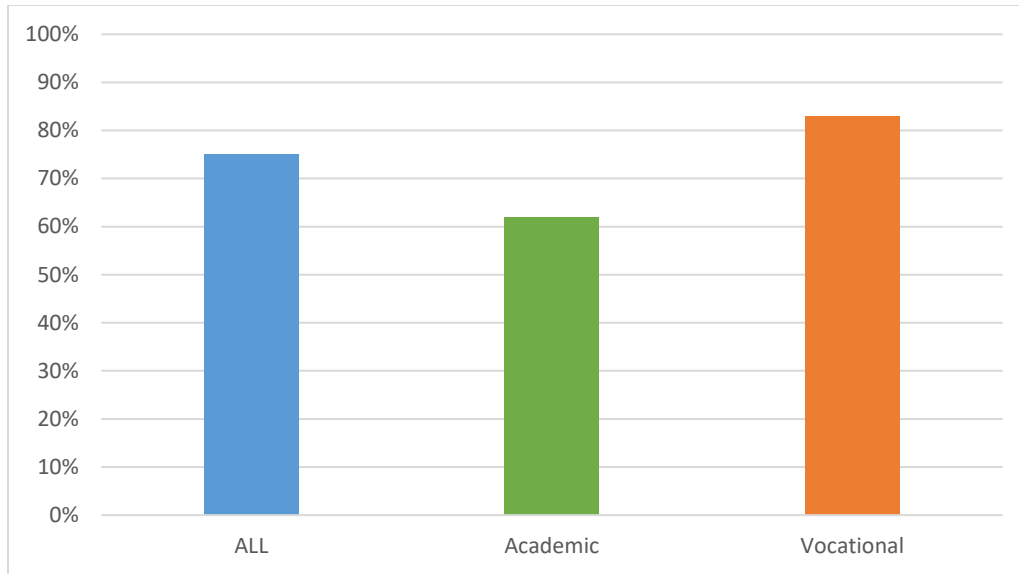


Figure 7. Percentage of GLTS Staff Rating Impact of FAR Course on Common Planning Time Meetings as High or Very High

GLTS Professional Culture

According to GLTS administrators, there has been a positive change in the professional culture of the school over the last few years. The RBT courses were identified as a major factor contributing to that shift. Results from the online survey have reinforced this conclusion. GLTS staff were whether RBT courses have contributed to a significantly improved professional culture among adults at the school. The results presented in Figure 8 demonstrated that almost all GLTS staff responding to the survey agreed with that statement – and that levels of agreement were almost equal among academic and vocational teachers.

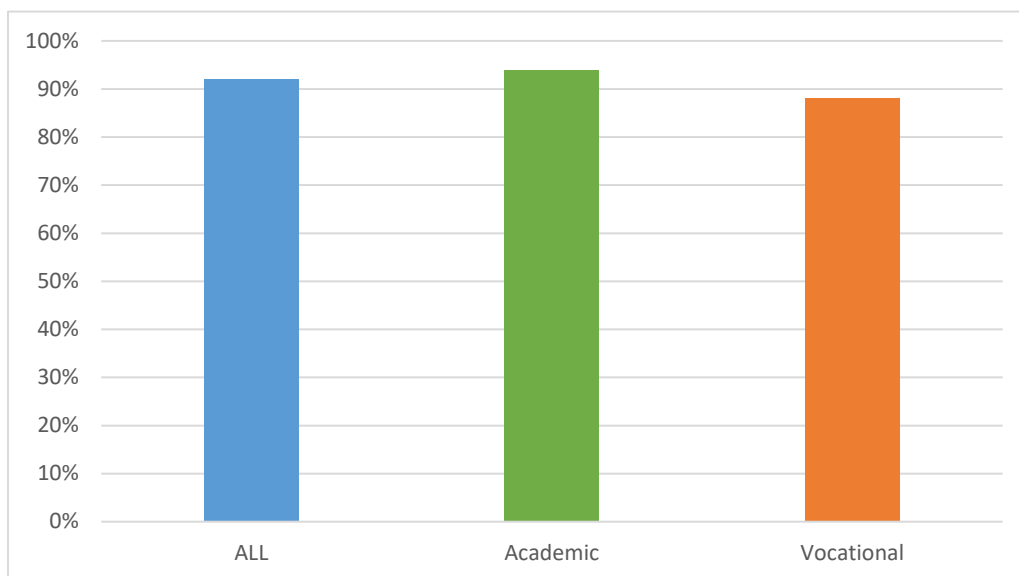


Figure 8. Percentage of GLTS Staff Agreeing that RBT Courses Improved Professional Culture in the School

A key factor in the change in professional culture has involved the school embracing a common language and concepts for discussing teaching presented by the RBT courses. The GLTS Superintendent believes that almost all teachers in the school are familiar with the RBT language and concept. For those that haven't taken the RBT courses, the common planning time meetings have served as forums for sharing the RBT language and concepts because so many teachers on the teams have taken the RBT courses. Administrators also noted that professional development sessions conducted by GLTS and by individual departments generally incorporated RBT language and concepts as well. This also helped share and reinforce a common language and concepts.

One administrator described the benefits of having a common language and culture:

“From an administrator standpoint, it was very valuable that we were all on the same page with each other and with our teachers. We can talk about activators, criteria for success, and the growth mindset and we don't need to explain these terms or concepts to each teacher. This makes conversations about teaching and learning more effective and allows you to be more specific and go deeper into issues.”

The GLTS Superintendent discussed other important manifestations of the changes in the school's professional culture:

“I've seen major improvement in teacher collaboration due to the RBT courses. Greater trust has been built among the teachers. There is a greater willingness to let other teachers into their classrooms, to discuss teaching methods, and to share student work. Casual discussions among teachers about instruction and learning are now regularly occurring.”

One of the GLTS teacher-leaders summarized the impact of the changed professional culture by noting that “our school is very different today than it was a few years ago. Expectations for students and teachers are far higher. Engagement of students is much greater. Academic performance of students is much improved.”

Student Academic Performance

In its 2012 and 2013 Accountability Reports from the state, GLTS was rated as a Level 3 school which meant it was among the lowest performing 20% of the schools in Massachusetts. By 2014, GLTS had achieved a Level 1 rating which meant that it was meeting gap narrowing goals established by the state. GLTS was one of three regional vocational schools that improved its accountability rating over that period of time, while 6 other regional vocational experienced a decline in their accountability rating.

The improvement in the GLTS accountability rating reflected important gains by GLTS students on the state assessment tests. The percentage of GLTS students demonstrating proficiency on the ELA state test increased by almost 40% during the time that RBT has worked with the school. The gap between GLTS and all other vocational schools declined from 22% to 6% over that period (see Figure 9).

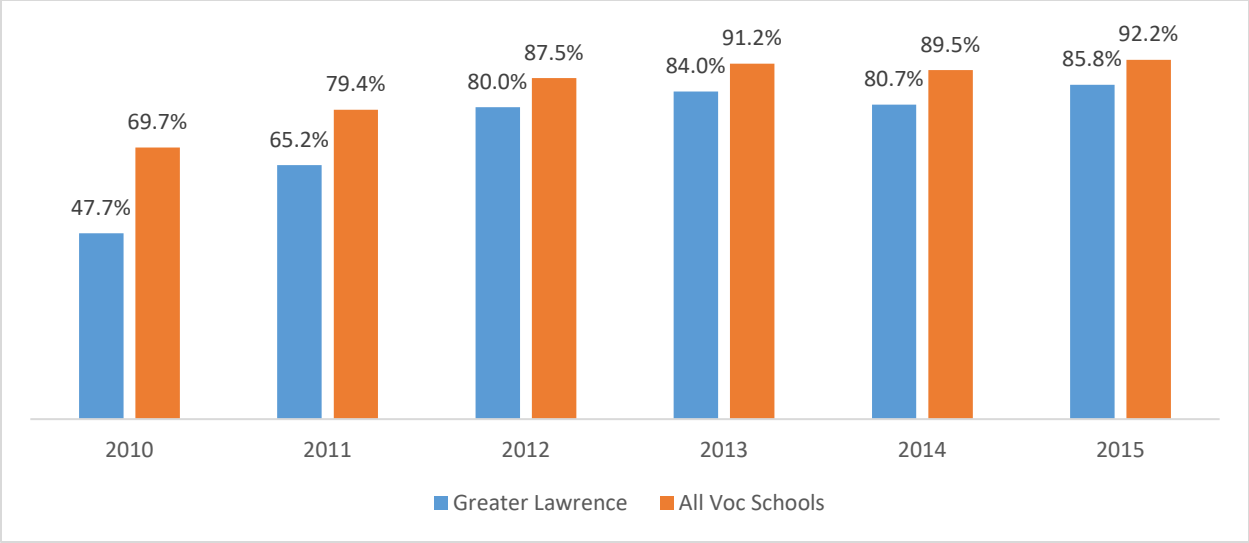


Figure 9. Percentage of Students Demonstrating Proficiency on State ELA Test

Smaller but still significant gains have been observed on the Math state tests over the same period of time. The percentage of GLTS students demonstrating proficiency on the Math state test increased by 17% and the gap between GLTS and all other vocational schools declined from 31% to 20% (see Figure 10).

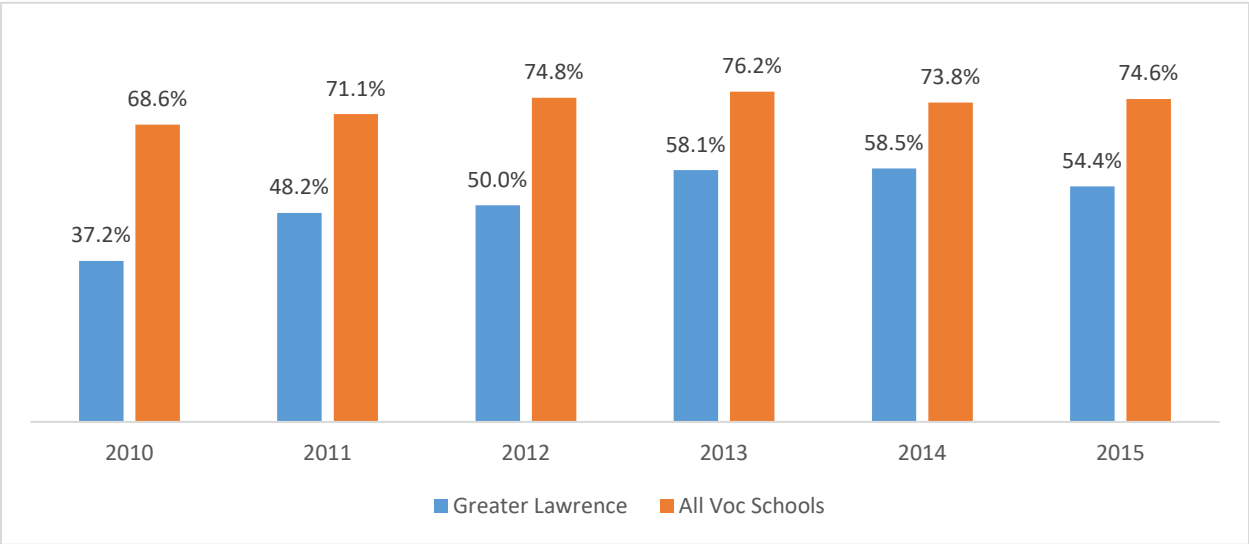


Figure 10. Percentage of Students Demonstrating Proficiency on State Math Test

Most of the GLTS administrators and teacher-leaders interviewed for this report believed that RBT courses contributed to these student academic gains. The courses were described as “pieces of the foundation.” The courses were described as “contributing to a schoolwide expectation and platform for what teachers are expected to do and how they deliver learning to students.” The RBT courses also “helped the school focus on both high-achieving as well as low-achieving students to have more students become proficient on the state tests.”

The online survey also asked GLTS staff whether the RBT courses contributed to the improved academic performance of GLTS students over the last few years. A substantial proportion of GLTS staff (87%) agreed with this statement including almost all academic teachers (94%).

Conclusion

Over the last six years, RBT has offered its teacher course to many of the GLTS teachers. All GLTS administrators have taken the RBT administrator course – either before or since they came to the school. RBT has also conducted a course to promote the use of formative student assessment and strengthen the use of common planning time meetings among GLTS teachers. This work helped GLTS staff understand and embrace a growth mindset while also strengthening their teaching practices. Administrators have used the CEIJ framework from the RBT administrator course to support implementation of a new staff evaluation system and improve the quality of their classroom observations and feedback to teachers. The RBT courses have also contributed to greater staff communication and collaboration using a common language and concepts around teaching, more effective use of common planning time by teachers, and an improved adult professional culture. Ultimately, the RBT program has contributed to considerable improvement in the academic achievement of GLTS students on the state assessments and a substantial reduction in the academic achievement gap that previously existed between GLTS and all other vocational schools.