MEMORANDUM   October 31, 2018

TO: Annie Wolfe
               Officer, Elementary Curriculum and Development

FROM: Carla Stevens
               Assistant Superintendent, Research and Accountability

SUBJECT: **THE LITERACY EMPOWERED INITIATIVE: IMPACTS ON HISD HIGH
               SCHOOL STUDENTS' PEFORMANCE IN CORE COURSES, 2017–2018**

The Literacy Empowered (LE) initiative provides support for all Houston Independent School District (HISD) high schools through expanded personalized instruction, the proficient use of PowerUp tools, and authentic literacy practices across all foundation courses. This evaluation report documented the impacts of the initiative on student performance in core high school courses based on the 2018 STAAR End-of-Course (EOC) exam results. The evaluation was guided by four questions and used a teacher survey, walkthrough visits, treatment effects, and multiple regression analyses to report on the implementation and impacts of the initiative.
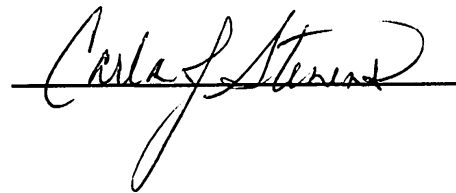
Key findings include:
- The survey showed that 69.4 percent of secondary teacher respondents taught English, 19.4 percent taught mathematics, 8.3 percent taught science, and 2.8 percent taught social studies.
- On average, survey respondents tended to agree or somewhat agree with statements that were consistent with what was expected in their delivery of LE instruction. The weighted average was at least 3.50 of 5.0, except for statements regarding efficacy of preparation and LE implementation support, which had weighted averages of 3.14 and 3.21, respectively.
- The highest weighted averages of the survey were with regards to LE instructional strategies and practices that involved talk, conversations, and asking questions with which respondents, on average, agreed or strongly agreed (weighted average of 4.00 and 4.07 of 5.0).
- On average, survey respondents somewhat agreed or disagreed with statements regarding their use of the universal screener to assess and monitor students' reading performance and growth and for placing them in flexible reading groups (weighted averages ranging from 2.59 to 3.14 of 5.0).
- Respondents recommended more LE strategies and activities and exposure to best LE practices that are tailored to core-content areas and the needs of a diverse HISD student and classroom population.
- A consistently high percentage of LE students identified as gifted and talented (G/T) (94.2%–100%) and not at risk for school dropout (87.8%–96.8%) performed at or above the Approaches Grade Level standard on all 2018 STAAR EOC exams.
- Treatment effects with regression adjustment (teffects ra) does not use matched treatment and control samples but estimates the counterfactual or missing data in the performance of treatment and non-treatment groups to determine performance differences and program effects. Results of treatment effects with regression adjustments analyses showed that a student selected at random, whose teacher did not participate in the LE professional

development outperformed their peers whose teachers completed the PD on the 2018 STAAR Algebra I EOC exam by 23 scale score points (ssp), Biology by 95 ssp, English I by 122 ssp, English II by 48 ssp, and U.S. History by 233.9 ssp.

- At-risk, English as a second language (ESL), special education, and gifted and talented (G/T) identification were the strongest predictors of LE students' performance on the 2018 STAAR Algebra I, Biology, English I, English II, and U.S. History EOC exams. Only G/T identification was a positive predictor.
- When students' written composition scores were added to the regression model, the score predicted 60 and 58 percent of students' performance on the STAAR English I and English II EOC exams, respectively.

Further distribution of this report is at your discretion. Should you have any further questions, please contact me at 713-556-6700.

_____CJS

Attachment
cc: Noelia Longoria
    Mechiel Rozas
    Jessica Chevalier

RESEARCH

Educational Program Report

THE LITERACY EMPOWERED INITIATIVE: IMPACTS ON HISD HIGH SCHOOL STUDENTS' PERFORMANCE IN CORE COURSES, 2017-2018

HISD | Research and Accountability

ANALYZING DATA, MEASURING PERFORMANCE.

THE LITERACY EMPOWERED INITIATIVE: IMPACTS ON HISD HIGH SCHOOL STUDENTS' PERFORMANCE IN CORE COURSES, 2017–2018

Executive Summary

The purpose of this evaluation was to determine the impact of the Houston Independent School District (HISD) Literacy Empowered (LE) initiative on the reading, literacy, and performance in core courses among high school students. Literacy Empowered is a districtwide initiative that provides support for high school students through the expansion of "personalized instruction through the proficient use of PowerUP tools and authentic literacy practices across all core foundation classes in preparation for postsecondary education and/or careers" (HISD, 2017a, p. VIII-55).

Students who constituted the study sample were linked to their teachers who completed the LE professional development (PD) by using unique identifiers. The evaluation was guided by four questions and surveyed teachers who completed the professional development (PD) associated with the LE initiative. Students' test data were analyzed, and treatment effect with regression adjustment was used to determine the impact of the initiative on students' performance. Multiple regression was used to predict the performance of LE students in the four core subjects assessed using the State of Texas Assessments of Academic Readiness (STAAR) End-of-Course (EOC) exams and regressed on key demographic and educational variables.

Key Highlights

- The survey showed that 69.4 percent of secondary teacher respondents taught English, 19.4 percent taught mathematics, 8.3 percent taught science, and 2.8 percent taught social studies.

- Survey respondents tended to agree or somewhat agree with statements that were consistent with what was expected in their delivery of LE instruction. The weighted average was at least 3.50 of 5.0, except for statements regarding efficacy of preparation and LE implementation support, which had weighted averages of 3.14 and 3.21, respectively.

- The highest weighted averages of the survey were with regards to LE instructional strategies and practices that involved talk, conversations, and asking questions where respondents agreed or strongly agreed (4.00 and 4.07 of 5.0).

- Survey respondents somewhat agreed or disagreed with statements regarding their use of the universal screener to assess and monitor students' reading performance and growth and for placing them in flexible reading groups (weighted averages ranging from 2.59 to 3.14 of 5.0).

- Survey respondents recommended more LE strategies and activities and exposure to best LE practices that are tailored to core-content areas and the needs of a diverse HISD student and classroom population.

- A consistently high percentage of LE students identified as gifted and talented (G/T) (94.2%–100%) and not at risk for school dropout (87.8%–96.8%) performed at or above the Approaches Grade Level standard on Algebra I, Biology, English I, English II, and U.S. History EOC exams.

- Treatment effects with regression adjustment (teffects ra) does not use matched treatment and control samples but estimates the counterfactual or missing data in the performance of treatment and non-treatment groups to determine performance differences and program effects. Results of the teffects ra analyses showed that a student selected at random, whose teacher did not participate in the LE professional development outperformed their peers whose teachers completed the PD on Algebra I by 23 scale score points (ssp), Biology by 95 ssp, English I by 122 ssp, English II by 48 ssp, and U.S. History by 233.9 ssp.

- At-risk, English as a second language (ESL), special education, and gifted and talented (G/T) identification were the strongest predictors of LE students' performance on the 2018 STAAR Algebra I, Biology, English I, English II, and U.S. History EOC exams. Only G/T identification was a positive predictor of STAAR EOC performance.

- When students' written composition scores were added to the regression model, the score predicted 60 and 58 percent of students' performance on the STAAR English I and English II EOC exams, respectively.

Recommendations

- Although, the survey sample was limited, given the relatively low-weighted average assigned to respondents' use of the universal screener, greater emphases need to be placed on the use of the universal screener and its importance in assessing and monitoring students' reading performance and growth and for placing students in flexible learning groups. This should also facilitate targeted instructions that meet the reading and learning needs of high school students.

- Survey respondents requested additional training to support the implementation of LE and exposure to the best practices and hands on approaches to teaching reading across the curriculum. Further, they requested more exposure to strategies that address students and classroom diversity, including ESL, special education, and G/T.

- Survey respondents requested a more widespread involvement of teachers in the development of the master courses so that they meet the diverse needs of a diverse HISD student population. This may involve allowing teachers to review drafts and provide feedback on these courses before final approval.

- Given the relatively low-weighted average on the selection of "Just Right" books and the significance of independent reading, students should be provided with the skills, time, and opportunities to select and read these books in and out of school.

- Teachers should be provided adequate opportunities and time to implement LE strategies and activities or incorporate them into their course content areas. This may require the use of demonstration lessons and video exemplars for reference, when needed.

Introduction

The Houston Independent School District (HISD) recognizes that strong reading, writing, communication, and thinking skills are the foundations for high school, college, and career success. The district commits to the inculcation of these skills through the Literacy Empowered initiative. The Literacy Empowered initiative is the literacy approach that provides support for all district high schools by expanding personalized instruction through the proficient use of PowerUp tools and authentic literacy practices across all core foundation classes in preparation for their postsecondary education and/or careers (HISD, 2017a, p. VIII-55). Literacy Empowered is designed to transform Tier 1 instruction in all HISD high schools by supporting teachers and leaders in the acquisition of the relevant pedagogy and tools that support 21st century student learning. It involves the utilization of existing computer and digital devices and core content master courses designed for students to personalize their learning pathways within state learning standards (HISD, 2017a). Literacy Empowered focuses on reading, writing, discourse using whole and small group learning, independent practice, and conferring among ninth through twelfth grade students in HISD during the 2017–2018 school year.

In LE, students engage in reading self-selected and assigned texts beginning at their levels and expanding their systems of strategic action to meet the demands of increasingly complex text (HISD, 2017a). According to the 2017–2018 School Guidelines, "Instructional programs for grades 6–12 include time for students to read authentic, self-selected, and assigned reading text daily for at least 120 minutes within their four core foundation classes" (HISD, 2017a, p. VIII-54). Students also engaged in authentic writing by discipline to expand and provide evidence of their textual understanding.

To facilitate the implementation of the Literacy Empowered initiative, the district procured materials for the establishment of classroom libraries, with diverse Lexile-level texts and digital libraries with personalized texts across all four core-foundation academic disciplines. The district also secured comprehension tool kits for small and large group support, and document-based questions (DBQ) kits for social studies classes to support comprehension, analysis, and writing (HISD, 2017a). In preparation for the delivery of Literacy Empowered, school administrators, leaders, and teachers were exposed to professional development associated with the key elements of the initiative.

The purpose of this evaluation was to determine the impact of Literacy Empowered on the reading and literacy attainment of ninth through to twelfth grade students in HISD. All high school students in HISD were eligible for participation in the program. The literature review, which follows, serves as a background to understanding the research on high school reading and literacy in the context of core-course instructions.

Literature Review

According to data from the National Center for Education Statistics (NCES), 37 percent of U.S. twelfth-grade students were reading at or above proficient level based on the 2015 National Assessment of Education Progress (McFarland, et al., 2017, May). Results of the State of Texas Assessments of Academic Readiness (STAAR) End-of-Course (EOC) exams indicated that 60 and 62 percent of HISD students performed at or above the Approaches Grade Level standard on the 2017 spring English I and English II exams, respectively (HISD, 2017b). This means that 40 and 38 percent, respectively, did not meet the standard the first time they took the exam. Literacy remains a critical issue in high school education. A report published in 2006 on the Standards for Middle and High School Literacy Coaches concluded "without targeted literacy instruction, many who graduate from high school will be ill-equipped for the demands of college or the new economy, relegated to remedial courses or dead-end jobs" (American Diploma Project cited in International Reading Association, 2006, p. 1).

The Center on Instruction made five recommendations for adolescent literacy instruction and provided study examples to substantiate each of these recommendations: (1) provide explicit instructions and supportive practice in the use of effective comprehension strategies throughout the school, (2) increase the amount and quality of open, sustained discussions on reading content, (3) set and maintain high standards for text, conversations, questions, and vocabulary, (4) increase students' motivation and engagement with reading, and (5) teach essential knowledge so that all students master critical concepts (Torgesen, et al., 2007). Essentially, instruction, exposure to reading, and engagement with reading are crucial in literacy improvements beyond the elementary years.

An action research study conducted by a high school teacher in Philadelphia, Pennsylvania demonstrated the use of key strategies that resulted in improved reading and reading engagement, appreciation for reading, and comprehension among honors students (Dickerson, 2015). These included (a) testing their reading levels prior to teaching, (b) increasing time for silent sustained or independent reading, (c) providing a variety of texts and allowing students to select their own texts, (d) getting student to write about and discuss their readings using notebooks, and (e) modeling reading by reading aloud and reading along with students. Dickerson (2015) also administered a student survey at the end of each quarter to determine students' perceptions and experiences. The survey showed positive feedback on the strategies used and their impacts on reading and comprehension.

As part of a publication volume dedicated to "Reading: The core skills," Allington and Gabriel (2012), identified six elements for reading that children should experience every day: (1) every child reads something he or she chooses; (2) every child reads accurately; (3) every child reads something he or she understands; (4) every child writes about something personally meaningful; (5) every child talks with peers about reading and writing; and, (6) every child listens to an adult read fluently. They contend that most of the classrooms they observed lacked these six elements. Allington and Gabriel (2012) called for the elimination of worksheets and workbooks and to use the resources to procure books, using the time saved for self-selecting readings, self-selected writing, literacy conversations, and read alouds; and to ban test preparation activities and materials during the school day. There are no studies that demonstrate improved reading or test performance because of student engagements in test preparation (Guthrie cited in Allington & Gabriel, 2012). Similar elements for reading were identified in the work of Allyn (2012) and Scherer (2012). These included offering students a range of reading materials, providing time for dialogue on readings, providing readers with a tool kit, letting readers read at their comfort levels, discussing books deeply and including students' reactions to their readings, allowing browsing and rereading, teaching students to curate their own reading lives, and allowing reading to be a joyful experience.

The implementation of these strategies and activities, however, are dependent on teachers and their perspectives of struggling readers. Moreau's (2014) survey of 39 middle school teachers across three different school districts found that (1) respondents believe that middle school students should already be competent grade-level readers, and (2) they did not believe that it was their job to teach specific reading skills in content area classes since they were restricted by a lack of knowledge and time. Clearly, changing those perceptions may be key in addressing middle and high school reading difficulties.

Similarly, based on science and social studies classroom observations, Ness (2009) reported that only three percent of 2,400 instructional minutes observed were devoted to reading comprehension. On inquiry, teachers did not feel that they were responsible or qualified to provide explicit instruction on reading comprehension. They highlighted the pressure associated with covering content in preparation for standardized state assessments as hindrances to providing reading instruction (Ness, 2009).

In summary, only reading will improve reading, more of it, with books students love and choose, while allowing them to write about and discuss their readings, monitoring their progress, listening to others read fluently, and eliminate worksheets, workbooks, and test preparation time to free resources and time for reading and discussion of reading materials. The evaluation focused on four key questions:

1. How did teachers perceive and experience the implementation of Literacy Empowered (LE)?

2. How did the observed lessons reflect key aspects of the LE initiative?

3. What is the demographic and educational composition of students in the evaluation sample?

4. What was the effect of LE on the students' performance on the 2018 state assessments?

Method

This evaluation is a quasi-experimental study designed to determine the impact of the LE initiative on student performance on the State of Texas Assessments of Academic Readiness (STAAR) End-of-Course (EOC) exams. Quasi-experimental studies use observational data to make inferential statements about the population of students using a representative sample of students. It is considered an alternative to the random control trials (RCT) in which subjects are randomly selected into control and treatment groups as a precondition for making inferential statements about the population from which the sample was drawn.

Principals, school administrators, and leaders, and teachers were exposed to three to 24 credit hours of professional development (PD) in preparation for the implementation of LE. The PD was available to teachers and other school personnel across the curriculum and included core-subject teachers of Algebra I, Biology, English, and U.S. History. All students whose core foundation teachers completed the PD were included in the analysis. The comparison group consisted of students whose teachers did not participate in the PD. Students were grouped by STAAR EOC exams.

A web-based survey was administered to the teachers who participated in the LE professional development to determine how they perceived and experienced the professional development, and the implementation associated with LE. The survey was developed in collaboration with two teacher development specialists who were involved in the implementation and supervision of the initiative. They ensured the survey was valid and tested before final submission to participants. The survey was disseminated to 121 teachers using SurveyMonkey™, which is a web-based data collection and analysis portal.

A random sample of ten classes, derived from a list of teachers who completed the LE professional development, was selected for walkthroughs. Random numbers were assigned to each of the teachers and the sample selected. Requests for permission to visit the school and conduct these walkthroughs were emailed to school principals with a reminder two weeks later. The purpose was to observe lesson delivery, the use of LE strategies, and the presence of artifacts in the classrooms as evidence that these strategies were utilized or being utilized. Two schools consented to the visits. The visits were conducted with the assistance of a teacher development specialist (TDS) for reliability.

Data Collection

Teachers' IDs from the eLearning databases for the LE initiative were used to link these teachers to their students. Student identification numbers (IDs), in turn, were used to link students to their STAAR EOC exam results and the demographic and educational data from the HISD Public Education Information Management System (PEIMS) using Microsoft Access. Data were exported, cleaned, and formatted in

Microsoft Excel spreadsheet and analyzed in Stata. Stata is a statistical software for the analysis of observational data.

The web-based survey questionnaire was disseminated to LE teachers using their email addresses. A reminder was sent out fifteen days later. Thirty-six or 29.8 percent of teachers responded to the survey. The response rate is consistent with observed trends for online surveys (see Saldivar, 2012; Hamilton as cited in Saldivar, 2012; HISD, 2015). The survey consisted of descriptive or Likert scale questions. The Likert scale questions measured respondents' degree of agreement or disagreement with statements on key LE components on a scale of 1–5 (1 = strongly disagree, 2 = disagree, 3 = somewhat agree, 4 = agree, and 5 = strongly agree).

An ethnographic approach using field notes was used to collect data on lesson deliveries during the walkthrough. Photos were also taken of lesson artifacts and other related components of the initiative present in the classrooms. Principals or assistant principals were debriefed after the visits.

Data Analysis

The data analyses involved the description of LE students' performance on the state assessments, summary of walkthroughs, measurement of LE treatment effects, and survey analyses of teachers who completed the PD. Teacher PD was used because these teachers would have acquired the skills and protocols necessary to implement the initiative's key components with fidelity: reading, writing, discourse using whole group and small group learning, independent practice, and conferring. It was anticipated that students whose teachers completed the PD would outperform their peers whose teachers did not complete the PD on the STAAR assessment, assuming the initiative was implemented with fidelity. This argument is consistent with current standards in the evaluation of educational programs and initiatives that require reporting program effects and effects sizes (Yoon, Duncan, Lee, Scarloss, & Shapley, 2009). U.S. Department of Education Institute for Education Sciences (IES) also designated an effect size in education of .25 as "substantively important" (IES, 2017, p. 22)

Stata treatment effect with regression adjustment (teffects ra) was used to determine the impacts or effects of the LE initiative on the STAAR EOC exam performance of students whose teachers participated in LE professional development prior to the delivery of the initiatives' key components. Teffects ra allows for the estimation of quasi-experimental casual effects from observational data. It estimates average treatment effects (ATE), among others, using robust or doubly robust estimators. Teffects does not use matched samples to determine program effects. Teffects ra determines the differences in the outcomes or performance of LE students and non-LE students by estimating the counterfactual or missing data for these LE and non-LE students. That is, how would LE students perform on the STAAR OEC exams if their teachers were not exposed to the LE PD, and how would non-LE students perform, if their teachers were exposed to the same PD. The impact is measured by the difference in the average outcome or performance of the treatment and non-treatment or comparison groups. Teffects have the advantage of regressing the attributes on either the treatment or outcomes without adversely affecting the error term or the selection bias (Cameron & Trivedi, 2005; Huber, 2015). In this case, it is regressed on the outcome and none of the attributes are related to the treatment. Regression adjustment (ra) estimators model the outcome to account for the non-random treatment of the assignment into treatment and non-treatment groups (Huber, 2015).

Survey data were summarized in SurveyMonkey™, exported to Microsoft Excel and presented as descriptive data in tables and charts. A summary analysis of the classroom observations is included to reflect the outcomes of the walkthroughs. These outcomes are not representative of delivery of the initiative districtwide and should be interpreted with caution.

Limitations

- Only two schools consented to the walkthrough making it difficult to determine the extent to which LE strategies were being implemented with fidelity. Care should be taken in the interpretation of the walkthrough data and information since the observations may not be representative of the entire delivery of the initiative.

- Literacy Empowered is a districtwide initiative, however schools and teachers appeared to have been self-selected for participation into the initiative. Students whose teachers did not participate are used as proxies for a control group in this quasi-experimental study. Those non-participating teachers, however, may not have had similar desires and motivation to participate in the initiative.

Results

How did teachers perceive and experience the implementation of Literacy Empowered (LE)?

Results of the LE teachers' survey are presented in charts and tables. The educational and instructional configurations, the instructional and implementation experiences of LE teachers, self-efficacy, and instructional supports as well as teachers' perceptions of their students' LE activities are presented in this section of the report. **Figure 1** shows the grade assignments for teachers who responded to the survey. **Table A1**, **Appendix A**, p. 21 provides details.

Figure 1. Percentage Distribution of Grade Assignments for LE Survey Respondents, 2017–2018 (n = 36)
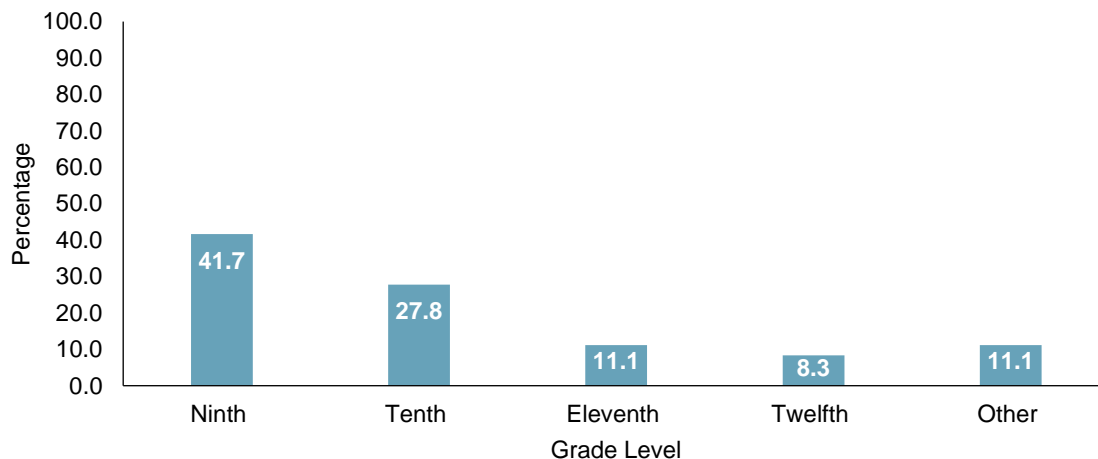
- Most survey respondents taught ninth (41.7%) and tenth (27.8%) grade students.

- According to Figure 1, 8.3 percent of respondents were twelfth-grade teachers. It also shows that 11.1 percent of respondents taught either eleventh or other configurations, each. Other assignments meant multiple grades.

Figure 2 displays the percentage distribution of the years of teaching experience of LE survey respondents. **Table A2**, Appendix A, p. 21 provides details.

Figure 2. Percentage Distribution of LE Survey Respondents' Years of Teaching Experience, 2017–2018 (n = 36)
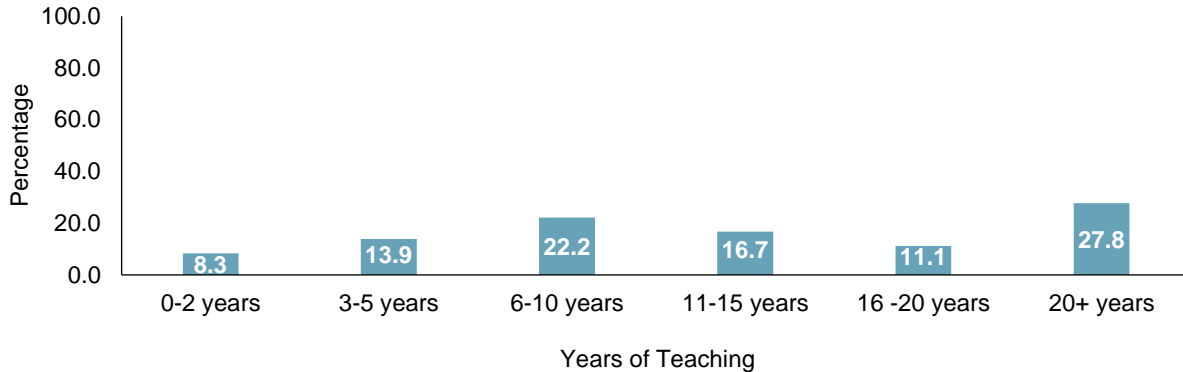
- Most survey respondents (27.8%) had twenty or more years of teaching experience, followed by 22.2 percent with 6–10 years of teaching experience.

- Based on Figure 2, 16.7 percent of the survey respondents had 11–15 years teaching experience.

- Only 8.3 percent of the survey respondents had 0–2 years of teaching experience.

Figure 3 shows the teaching roles of LE survey respondents. **Table A3**, Appendix A, p. 21 provides details.

Figure 3. Percentage Distribution of Teaching Roles of LE Survey Respondents, 2017–2018 (n = 36)
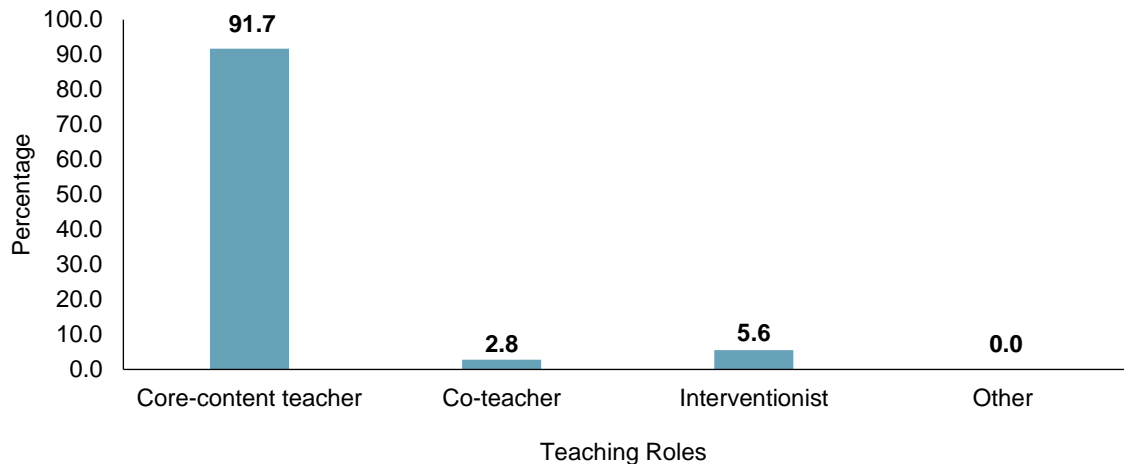
- The majority (91.7%) of the LE survey respondents were core-content teachers.

- According to Figure 3, 5.6 percent of LE survey respondents were interventionists and 2.8 percent were co-teachers.

Figure 4 shows the core-content areas taught by LE survey respondents. **Table 4**, Appendix A, p. 21 provides details.

Figure 4. Core-Content Areas Taught by LE Survey Respondents, 2017–2018 (n = 36)
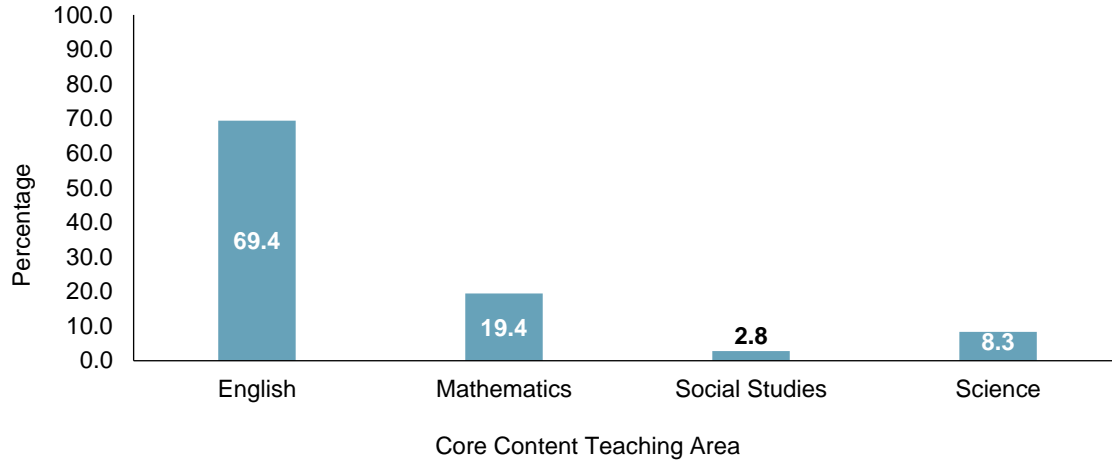
- Most LE survey respondents (69.4%) taught English as a core-content area.

- According to Figure 4, 19.4 percent of the LE survey respondents taught mathematics, 8.3 percent taught science, and 2.8 percent were social studies teachers.

Figure 5 displays the number of instructional minutes allocated for the delivery of LE as reported by survey respondents. Details are provided in **Table A5**, Appendix A, p. 22.

Figure 5. Percentage Distribution of the Approximate Number of LE Respondents Instructional Minutes, 2017–2018 9 (n = 36)
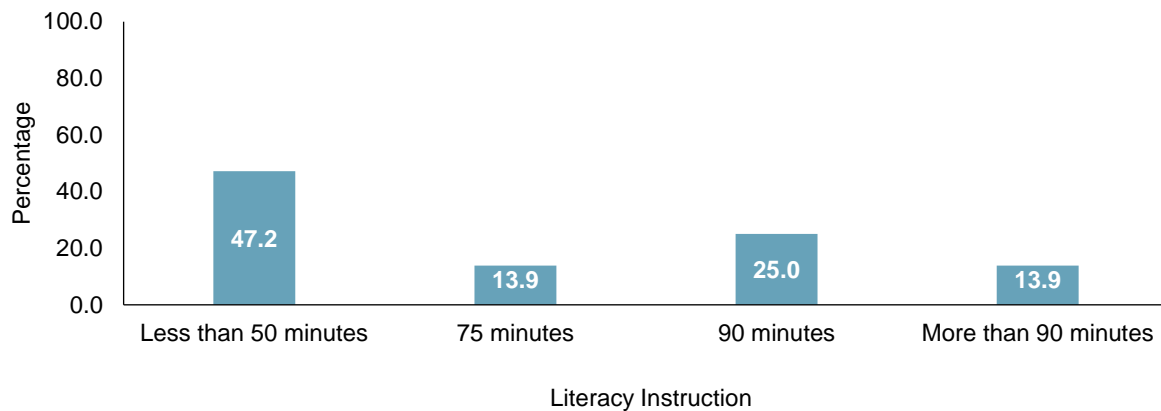
- Most respondents (47.2%) had less than a 50-minute timeframe in which to implement or incorporate the LE initiative into their instructions. This was followed by respondents who had 90 minutes (25%) in which to incorporate LE instructions and strategies.

- According to Figure 5, 13.9 of respondents claimed to have had either 75 minutes or more than 90 minutes, each, within which to implement the LE initiative.

Figure 6 shows the LE language of instruction distributed by the percentage of survey respondents in the study. **Table A6**, Appendix A, p. 22 provides details.

Figure 6. Percentage Distribution of Primary Language of Instruction Among LE Survey Respondents, 2017–2018 (n = 36)
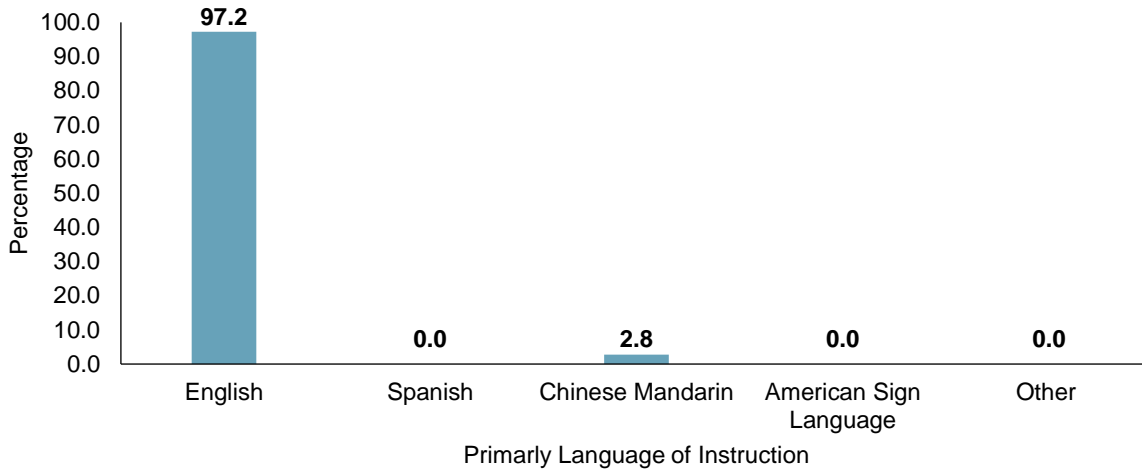
- All the LE survey respondents instructed in either English (97.2%) or Chinese Mandarin (2.8%).

Figure 7 shows the participation rate for teachers who were engaged in the LE professional development. **Table A7**, Appendix A, p. 22 provides details.

Figure 7. Professional Development Participation Rates for LE Survey Respondents, 2017–2018 (n = 29)
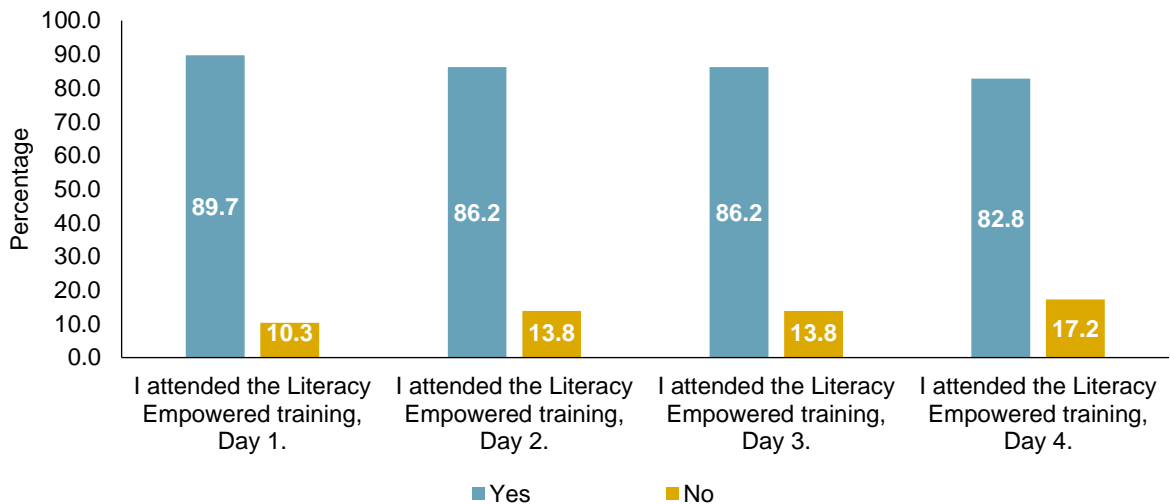
- Most respondents, between 82.8 and 89.7 percent, appeared to have attended at least one of the four-day literacy empowered training.

- Between 10.3 and 17.2 percent of respondents did not attend at least one of the LE training day sessions.

Figure 8 displays the weighted averages of survey respondents' agreement or disagreement with their teaching efficacy, resources, and instructional practices associated with the LE initiative, on a scale of 1 to 5, using ten related statements. **Table A8**, Appendix A, p. 23 provides details.

Figure 8. Efficacy, LE Resources, and Instructional Practices of Survey Respondents, 2017–2018 (n = 29)
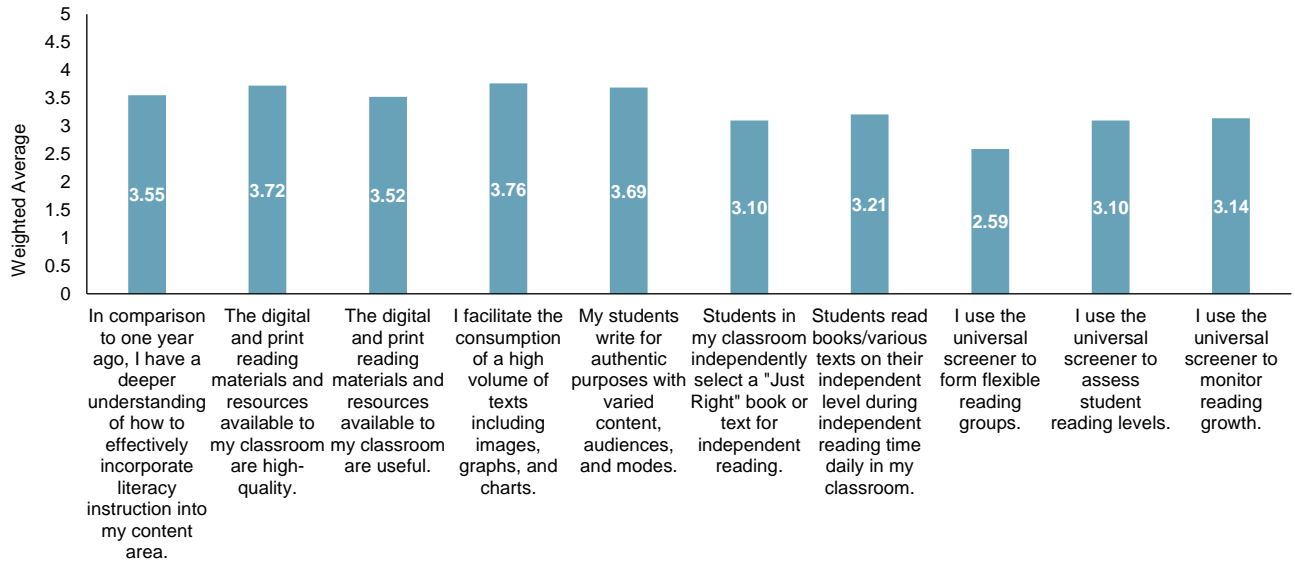
- On average, survey respondents appear to agree or somewhat agree (weighted average of 3.55 of 5.0) that, compared to one year ago, they had a deeper understanding of how to effectively incorporate literacy instruction into their core-content area.

- On average, respondents agreed or somewhat agreed that the digital and print reading materials and resources available to their classrooms were useful (weighted average of 3.52 of 5.0) and of high quality (weighted average of 3.72 of 5.0).

- On average, survey respondents agreed or somewhat agreed (weighted average 3.76 of 5.0) that they facilitated the consumption of a high volume of text that included images, graphs, and charts. They generally agreed (weighted average 3.69 of 5.0) that their students wrote for authentic purposes with varied content, audiences, and modes.

- Respondents appeared to agree or somewhat agree (weighted average of 3.10 of 5.0) on whether students in their classrooms independently selected "Just Right" books or texts for independent reading, and whether they read various books and texts on their independent reading levels during daily independent reading time in their classrooms (weighted average of 3.21 of 5.0).

- Respondents either disagreed or somewhat agreed that they used the universal screener to assess student reading levels (weighted average of 3.10 of 5.0), monitor student reading growth (weighted average of 3.14 of 5.0), and form flexible reading groups (weighted average of 2.59 of 5.0).

Figure 9 shows the weighted averages of survey respondents' agreement or disagreement with LE teaching and learning practices based on a scale of 1 to 5 using seven related statements. **Table A9**, Appendix A, p. 23 provides details.

Figure 9. Teaching and Student Learning Practices of LE Survey Respondents, 2017–2018 (n = 29)
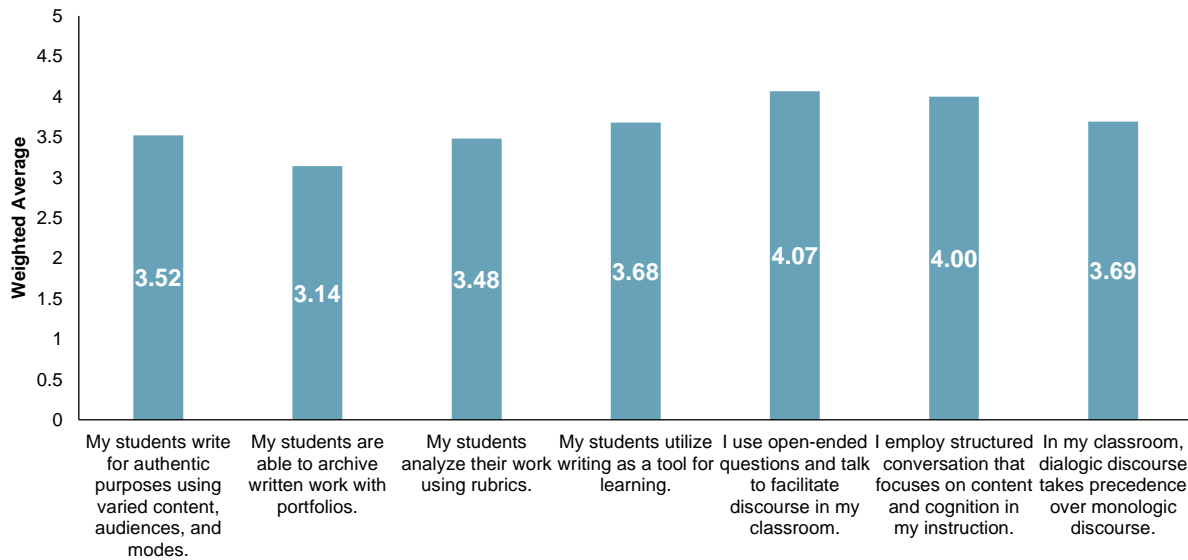
- Survey respondents agreed or somewhat agreed (weighted average 3.52 of 5.0) that their students wrote for authentic purposes using varied content, audiences, and modes but on average, they somewhat agreed (weighted average of 3.14 of 5.0) that their students were able to archive written work with portfolios.

- Respondents agreed or somewhat agreed (weighted average of 3.48 of 5.0) that their students analyzed their work using rubrics and that they utilize writing as a learning tool (weighted average of 3.68 of 5.0).

- Respondents agreed or strongly agreed (weighted average of 4.07 of 5.0) that they used open-ended questions and talked to facilitate discourse in their classrooms and that they employed structured conversations that focused on content and cognition in their instruction (weighted average of 4.00 of 5.0).

- Survey respondents agreed or strongly agreed (weighted average of 3.69 of 5.0) that dialogic discourse took precedence over monologic discourse in their classrooms.

Figure 10 shows, on a scale of 1 to 5, the weighted averages of LE survey respondents' agreement or disagreement with two LE instructional support statements. **Table A10**, Appendix A, p. 24 provides details.

Figure 10. Instructional Support for LE Survey Respondents, 2017–2018 (n = 29)
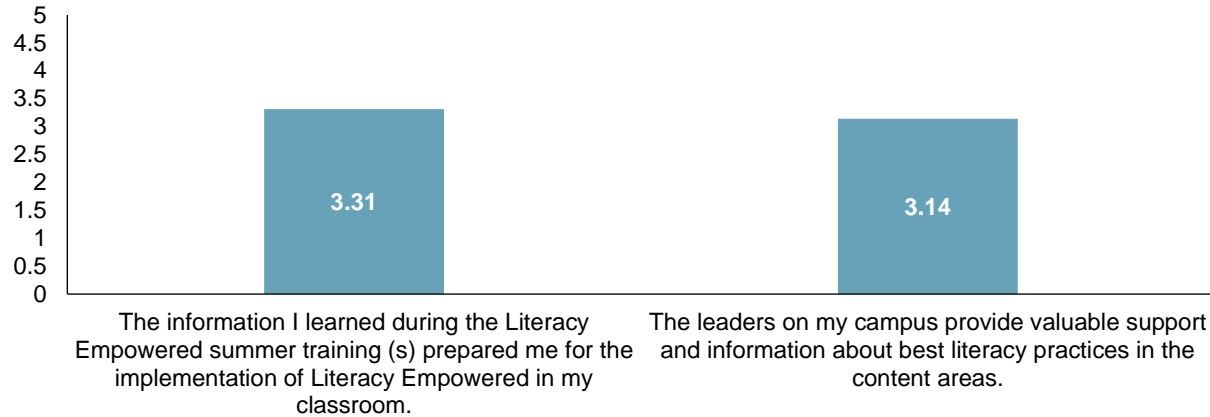
- On average, teacher respondents agreed or somewhat agreed (weighted average of 3.31 of 5.0) that the information they learned during the LE summer training prepared them for the LE implementation in their classrooms.

- On average, teacher respondents either agreed or somewhat agreed (weighted average of 3.14 of 5.0) that leaders on their campuses provided valuable support and information about best LE practices in their content areas.

Survey respondents were asked to indicate their agreement or disagreement with statements related to HISD secondary core-content master courses and the implementation of the LE initiative. **Figure 11** displays the responses. **Table A11**, Appendix A, p. 24 provides details.

Figure 11. LE Survey Responses on Structure and Framework of HISD Secondary Core-Content Master Courses, 2017–2018 (n = 29)
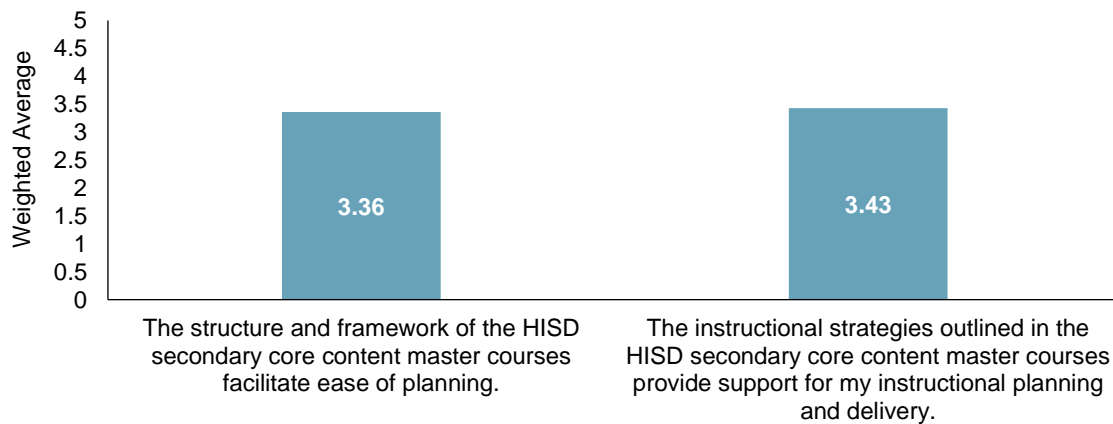
- On average, respondents agreed or somewhat agreed that the structure and framework of the HISD secondary core-content master courses facilitated the ease of planning for their implementation of Literacy Empowered (weighted average of 3.36 of 5.0).

- On average, respondents agreed or somewhat agreed that the instructional strategies outlined in the HISD secondary core-content master courses supported their LE instructional planning and delivery (weighted average of 3.43 of 5.0).

Survey respondents were also asked two open-ended questions: (1) What additional professional development opportunities would you like to receive to further support Literacy Empowered implementation? and (2) What additional details/information would you like to see in the HISD master courses to further support LE implementation? Respondents were also asked to provide any additional information that may not have been addressed in the survey. Responses are summarized in the two sections which follow.

Additional Professional Development Proposed

There were 29 responses to the related question on proposing additional LE-related professional development. Respondents wanted exposure to more best practices and more time to implement the Literacy Empowered professional development. They also wanted more Literacy Empowered training and resources to enhance implementation. Details are provided in **Table A12**, Appendix A, p. 25.

Improvement in HISD Master Courses

With respect to improvements to the HISD master courses for the delivery of LE, 19 responses were provided. These responses are detailed in **Table A13**, Appendix A, p. 26.

- Teacher respondents wanted exposure to more best practices, including current strategies that are successful to further support literacy implementation.

- One respondent who taught at an Achieve 180 school, found it hard to devote time to review the master courses and adjust them to the needs of his/her scholars.

- Respondents wanted more specific needs-based professional development training, particularly geared toward the needs of Early College students or "reality pedagogy" for English language learners, special education students, and students identified as gifted and talented.

- Respondents also wanted a team approach to the development of the master courses to reduce their perceived repetitiveness and to increase the variety of strategies for delivering these master courses.

How did the observed lessons reflect key aspects of the LE initiative?

Two English language arts (ELA) lessons were observed in two high schools. Lesson One used the three-big-questions strategy to assist students in comprehending a passage on the permanent closure of the Ringling Brothers Circus based on allegations of animal cruelty. The lesson objective and agenda with time-on-task were clearly written on the dry-erase board (**Figure B1**, p. 27).

Observation details of Lesson One are in **Appendix B**, p. 27. Students were able, in small group discussions, to identify the key points of the article by answering the three big questions (1) What surprised me? (2) What did the author expect me to already know? and (3) What changed, challenged, or confirmed what I thought I knew (**Figure B2**, p. 28)? Students wrote their responses on flipchart paper and posted them on the classroom walls (**Figure B3**, p. 28). The teacher modeled responses to those big questions, using a whole-class approach, before dividing the class into small groups. Students read the article aloud or asked their peers to read aloud before beginning the exercise. Students appeared to understand the purpose and objective of the article based on their responses, discussion, and their charts. An inquiry into students' previous knowledge and familiarity with the circus would have established some context and

experience for a more meaningful treatment of the article. Students' own point of view could have been sought and served as the basis for later writing on the topic or issues dear to them.

Students' writing folders (**Figure B4**, p. 29) and "Saddleback" and "Just Right" books were neatly and prominently arranged on classroom shelves. A review of five of the folders showed students' attempts at writing but did not reflect the writing process sequenced from draft to publication pieces. Parental forms[1], as seen in the folders, were unsigned. This seemed to be consistent with survey responses on written portfolios statement in Figure 9, p.12 in which teachers tended to somewhat agree (3.14 of 5.0) on their students' ability to archive written work using portfolios. Notwithstanding, the use of whole calls as a model for answering the three big questions, the use of the three big questions in small groups, and the read alouds were all key aspects of the LE initiative.

Lesson Two (Appendix B, p. 30) also had clearly a written objective and agenda posted in the classroom. Students were seated in table groups as the teacher used three prompts posted on flipchart paper to assist students in writing their own creation myths. The prompts were (1) Must have, (2) Might have, and (3) Will not have (**Figure B5**, p. 30). Students were quizzed to complete the prompts based on their apparent prior knowledge on writing.

While the learning objective focused on comprehension and expanded reading skills, students were given a writing activity with eight guiding questions. In addition, students were given eight questions, listed on the classroom whiteboard, to guide the development of their own creation myth. **Figure B6**, (p. 31) displays the questions.

It appeared inconclusive what the class assignment was designed to accomplish, considering the LE components. The class assignment itself seemed to require more than the allocated one-hour class for completion. Eventually, students were told that the task would be continued in the next class if they ran out of time. Further, as mentioned, the lesson objective appeared to be incompatible with the class assignment unless this was the continuation of a prior lesson but that was not communicated. The use of writing prompts, guiding questions, and small or table groups and the whole-class approach to developing the prompts were consistent with key LE components.

What is the demographic and educational composition of students in the LE evaluation sample?

Students' STAAR EOC exam results were used to determine the effect of the Literacy Empowered initiative on the performance of students whose teachers completed the professional development. It was also used to predict students' performance on the 2018 STAAR EOC Algebra I, Biology, English I, English II, and U.S. History exam results.

Table C1, **Appendix C**, (p. 32) shows the sample of students (10,277) whose teachers completed the LE professional development and 26,807 students whose teacher did not participate in the PD. The district data were used for context.

- There was a substantially lower proportion of ESL (23.3% vs 68.5%), Asian (2.5% vs 4.1%), White (4.3% vs 8.7%), and special education (3.6% vs 7.2%) students in the treatment sample than there were in the general student population in HISD.

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[1] Parental forms are paper forms that are to be signed by parents as evidence that they had seen and reviewed their student's writing portfolio. These were inserted into the portfolios.

What was the effect of LE on students' performance on the 2018 state assessments?

Table C2, Appendix C, (p. 32) displays the percentage of LE students who performed at or above the Approaches Grade Level standard on the STAAR EOC exams.

- A consistently high percentage of LE students identified as gifted and talented (G/T) (94.2% – 100%) and students who were not at risk for school dropout (87.8% - 96.8%) performed at or above the Approaches Grade Level standard on all EOC exams.

- Less than 50 percent of special education LE students performed at or above the Approaches Grade Level standard on the STAAR EOC exams, except U.S. History (54.3%).

- Less than 50 percent of English as a second language (ESL) LE students performed at or above the Approaches Grade Level standard on the STAAR EOC English I, English II, and U.S. History.

- Between 71.1 percent and 76.2 percent of at-risk LE students performed at or above the Approaches Grade Level standard on Algebra I, Biology, and U.S. History EOC exams. Less than 50 percent of at-risk LE students performed at or above the Approaches Grade Level Standard on STAAR English I (44.3%) and English II (49.2%) EOC exams.

Table C3 to **Table C7** in Appendix C, (pp. 33–34) show the average treatment effects (ATE) of the LE initiative on the STAAR EOC Algebra I, Biology, English I, English II, and U.S. History exam results of students whose teachers completed the LE professional development.

- Treatment effects with regression adjustment (teffects ra) does not use matched samples but estimates the counterfactual or missing data in the performance of treatment and non-treatment groups to determine performance differences and program effects. Based on the teffects ra results, a high school student, selected at random, whose teacher was not exposed to the LE professional development, would have outperformed his/her peers whose teachers completed the professional development on the STAAR EOC Algebra I by 23.7 scale score points (ssp), Biology by 95 ssp, English I by 122.2 ssp, English II by 48 ssp and U.S. History by 233.9 ssp. The differences were all statistically significant (p < .001) (two-tailed).

Table C8 to **Table C12**, Appendix C, (pp. 34–35) show selected predictors of LE students' performance on the STAAR EOC Algebra I, Biology, English I, English II, and U.S. History exam results, respectively.

- Being at-risk for school dropout (at-risk) (23%), gifted and talented (G/T) identification (19%), special education (14%), English as a second language (ESL) (12%), and being male (7%) were all significant predictors of LE students' performance on the STAAR EOC Algebra I exam (p < .001) (two-tailed). Overall, however, the model predicted only 17 percent of the Algebra I performance. Being at-risk and G/T identification were the strongest predictors, with the latter being the only positive predictor (Table C8, Appendix C, p. 34).

- Being at-risk (32%), ESL (22%), G/T identification (21%), and special education (12%) were significant predictors of LE students' performance on the STAAR EOC Biology exam (p < .001) (two-tailed). Overall, the model predicted 30% of students' performance in Biology. Being at-risk and ESL were the strongest predictors. G/T identification was the only positive predictor (**Table C9**, Appendix C, p. 34).

- ESL (37%), at-risk (26%), G/T identification (22%), male (13%), and special education (12%) were statistically significant predictors of LE students' performance on the STAAR English I exam for Model

I (p < .001) (two-tailed). Being ESL and at-risk were the strongest predictors. G/T identification was the only positive predictor. Overall, the model predicted 42 percent of students' performance on the English I EOC exam (**Table C10**, Appendix C, p. 35). Writing composition was added to Model 2. Overall, Model 2 predicted 70 percent of the performance on English I while writing alone positively predicted 60 percent of the English I score and reduced the predictability of ESL, at-risk, and G/T, substantially.

- All seven selected predictors, ESL (39%), at-risk (28%), G/T (27%), special education (11%), Career and Technical Education (CTE) (9%), economically-disadvantaged (9%), and gender (5%) were statistically significant (p < .001) for LE student's performance on the STAAR English II exam. Being ESL and at-risk were the strongest predictors. Overall, the model predicted 60 percent of students' performance on the English II EOC exam (**Table C11**, Appendix C, p. 35). Overall, Model 2 predicted 79 percent of LE students' English II performance. Writing composition positively predicted 58 percent of that score while substantially reducing the predictability of ESL, at risk, and G/T.

- ESL (37%), at-risk (23%), G/T identification (18%), and special education (14%) were statistically significant predictors of LE students' performance on the STAAR U.S. History EOC exams (p ≤ .05). ESL and at-risk were the strongest predictors of U.S. History performance. Overall. the model predicted 30 percent of LE students' performance on the U.S. History results (Table C12, Appendix C, p. 35).

Discussion

This evaluation sought to answer four questions to shed light on the implementation of the Literacy Empowered initiative and its effect on students' performance. To answer these questions, core-content teachers who participated in LE professional development prior to implementation were surveyed to determine their related perceptions and experiences. Students' performance on STAAR EOC assessments for Algebra I, Biology, English I, English II, and U.S. History were analyzed using treatment effect with regression adjustment (teffects ra) on key demographic and educational variables. In addition, students' performances were regressed on key variables as predictors of performance in the EOC assessments, and walkthrough visits were conducted to observe the implementation of the LE initiative.

Teacher respondents tended to agree with statements that were consistent with what was expected in their delivery of LE instruction. Their weighted averages for these statements were at least 3.50 on a 5.0 Likert Scale. Respondents appeared to agree or somewhat agree with statements regarding the preparation for and support associated with the implementation of the LE Initiative. In this case, their weighted averages ranged from 3.14 to 3.21. Overall, respondents had their highest average weights for statements about instructional practices that involved talk, conversations, and asking questions (4.00 and 4.07).

Respondents were varied in their assessment of their LE student practices. They appeared to agree more with statements about students' writing practices (writing for authentic purposes and using writing as a learning tool) weighted averages for these statements did not exceed 3.68 of 5.0. Respondents appeared to be less confident about their students' ability to select "Just Right" books independently or to read texts on their independent levels during independent reading (3.10 and 3.21, respectively). This is critical since effective practice for high school reading recommends increased time for independent reading and that students should have choice books, self-selected for independent reading (Allington & Gabriel, 2012; Allyn, 2012; Dickerson, 2015; Scherer, 2012).

Overall, respondents barely agreed with statements related to their use of the universal screener to assess and monitor students' reading and reading growth and placing them into flexible reading groups. The weighted averages for these statements ranged from 2.59 to 3.14. Failure to adequately assess and monitor students' reading would pose a challenge for placing them into those flexible reading groups and adequately

meeting students' reading needs. Overall, this statement had the lowest average rating of the survey at 2.59. Dickerson (2015) recommended the reading assessment of all students prior to teaching as one of the key strategies in effective high school reading instruction. Research on teaching reading and comprehension in core-content areas indicate that teachers do not feel that they have the time and opportunity to teach reading skills because of the emphasis on passing standardized tests (Moreau, 2014; Ness, 2009). Respondents suggested more class time to implement LE and requested that administrators provide opportunity to implement LE initiatives "instead of doing STAAR prep." Further, the survey showed that most respondents had less than 50 minutes per class in which to teach content and incorporate LE. The HISD School Guidelines, 2017–2018 recommended 120 minutes for literacy instruction across sixth- to twelfth-grade core foundation classes (HISD, 2017a). It is unknown how this is to be parsed out among these core foundation classes.

Most student groups in the sample appeared to have performed at or above Approaches Grade Level standard in Algebra I, Biology, and U. History EOC exams. The performance for English I and English II were varied, ranging from a high of 87.8 and 96.3 percent, respectively for non-at-risk students and a low 15.2 and 10.1 percent, respectively for English as a second language students. It is the expectation that LE initiative strategies and activities would most likely be used in English I and English II courses but as will be shown later there were other factors that could have influenced students' performance in the core content area.

Results of the Teffects ra showed that a student, whose teacher was in the control group, selected at random from the population of high school students would have scored better on the 2018 STAAR EOC Algebra I, Biology, English I, English II, and U.S. History assessments than their peers whose teachers completed the LE initiative PD. Again, teffects ra does not use matched groups to determine program effects. Using the counterfactual or the missing data estimated by the regression adjustment (ra), teffects computed the average performance differences between the treatment and control groups by EOC exams results. Again, failure to adequately assess and monitor students' reading performance and growth may mean that respondents were not able to effectively identify students' reading needs and to tailor instruction or utilize appropriate strategies to meet the needs of these students. This is further supported by the failure of respondents to agree that their students can select "Just Right" books independently. The research shows that independent reading and students' independent selection of choice books were key elements in the improvement of high school reading (Allington & Gabriel, 2012; Dickerson, 2015). Additionally, teachers' low rating on their LE preparation and support does suggest that they believed that may not have had all they needed to effectively implement the LE initiative. Respondents requested more LE training, more exposure to best LE instructional practices, and more resources to improve implementation.

There are other factors that impinge on LE students' performance on the STAAR EOC tests. English as a second language (ESL), at risk for school dropout, and G/T identification were the strongest statistically significant predictors of students' performance on all five STAAR EOC tests for 2018. G/T was the only positive predictor. Writing composition predicted a substantial part of English I and English II performance for LE students in Model 2. Addressing the effects of these predictors on students' reading are critical to improve the effectiveness of the LE initiative.

Respondents suggested a team approach to the development of master courses to increase the length of the lessons and reduce their formulaic and repetitive nature. They also called for what they described as "realistic pedagogy" that addressed classroom diversities like early college, English language learners (ELL), special education, G/T, and low-performing, non-special-education students. Respondents also believed that contextually, the master courses should be flexible enough to meet the needs of Achieve 180 students and classrooms.

Recommendations

- Although, the survey sample was limited, given the relatively low-weighted average assigned to respondents' use of the universal screener, greater emphases need to be placed on the use of the universal screener and its importance in assessing and monitoring students' reading performance and growth and for placing students in flexible learning groups. This should also facilitate targeted instructions that meet the reading and learning needs of high school students.

- Survey respondents requested additional training to support the implementation of LE and exposure to the best practices and hands on approaches to teaching reading across the curriculum. Further, they requested more exposure to strategies that address students and classroom diversity, including ESL, special education, and G/T.

- Survey respondents requested a more widespread involvement of teachers in the development of the master courses so that they meet the diverse needs of a diverse HISD student population. This may involve allowing teachers to review drafts and provide feedback on these courses before final approval.

- Given the relatively low-weighted average on the selection of "Just Right" books and the significance of independent reading, students should be provided with the skills, time, and opportunities to select and read these books in and out of school.

- Teachers should be provided adequate opportunities and time to implement LE strategies and activities or incorporate them into their course content areas. This may require the use of demonstration lessons and video exemplars for reference, when needed.

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Appendix A

Table A1. Grade Level Assignment of Literacy Empowered Survey Respondents, HISD, 2017-2018		
Grade level	%	n
Ninth	41.7	15
Tenth	27.8	10
Eleventh	11.1	4
Twelfth	8.3	3
Other (please specify)	11.1	4
Total		**36**
No responses		**0**

Table A2. Teaching Experience of HISD Literacy Empowered Survey Respondents, 2017–2018		
Years	%	n
0-2 years	8.3	3
3-5 years	13.9	5
6-10 years	22.2	8
11-15 years	16.7	6
16 -20 years	11.1	4
20+ years	27.8	10
Total		**36**
No Responses		**0**

Table A3. Teaching Configurations of HISD Literacy Empowered Survey Respondents, 2017–2018		
Teaching Configuration	%	n
Core-content teacher	91.7	33
Co-teacher	2.8	1
Interventionist	5.6	2
Other (please specify)	0.0	0
Total		**36**
No Responses		**0**

Table A4. Frequency Distribution of Core Courses Taught by HISD Literacy Empowered Survey Respondents, 2017–2018		
Core Course	%	n
English	69.4	25
Mathematics	19.4	7
Social Studies	2.8	1
Science	8.3	3
Total		**36**
No Responses		**0**

Table A5. Daily Literacy Instructional Time Among Literacy Empowered Survey Respondents in HISD, 2017–2018

Instruction Time	%	n
Less than 50 minutes	47.2	17
75 minutes	13.9	5
90 minutes	25.0	9
More than 90 minutes	13.9	5
Total		**36**
No Responses		**0**

Table A6. Survey Respondents' Language of Instruction for Literacy Empowered in HISD, 2017–2018

Language of Instruction	%	n
English	97.2	35
Spanish	0.0	0
Chinese Mandarin	2.8	1
American Sign Language	0.0	0
Other (please specify)	0.0	0
Total		**36**
No Responses		**0**

Table A7. HISD Literacy Empowered Professional Development Participation of Survey Respondents, 2017–2018

Professional Development	Yes		No		Total
	%	n	%	n	
I attended the Literacy Empowered training, Day 1.	89.7	26	10.3	3	29
I attended the Literacy Empowered training, Day 2.	86.2	25	13.8	4	29
I attended the Literacy Empowered training, Day 3.	86.2	25	13.8	4	29
I attended the Literacy Empowered training, Day 4.	82.8	24	17.2	5	29
Total					**29**
No Responses					**7**

Table A8. Efficacy and Instructional Practices of Literacy Empowered Survey Respondents in HISD, 2017–2018

Efficacy and Instructional Practices	Strongly Disagree		Disagree		Somewhat Agree		Agree		Strongly Agree		Total	Weighted Average
	%	n	%	n	%	n	%	n	%	n	%	
In comparison to one year ago, I have a deeper understanding of how to effectively incorporate literacy instruction into my content area.	6.9	2	13.8	4	10.3	3	55.2	16	13.8	4	29	3.55
The digital and print reading materials and resources available to my classroom are high-quality.	6.9	2	3.5	1	20.7	6	48.3	14	20.7	6	29	3.72
The digital and print reading materials and resources available to my classroom are useful.	10.3	3	6.9	2	20.7	6	44.8	13	17.2	5	29	3.52
I facilitate the consumption of a high volume of texts including images, graphs, and charts.	3.5	1	3.5	1	31.0	9	37.9	11	24.1	7	29	3.76
My students write for authentic purposes with varied content, audiences, and modes.	10.3	3	3.5	1	17.2	5	44.8	13	24.1	7	29	3.69
Students in my classroom independently select a "Just Right" book or text for independent reading.	20.7	6	13.8	4	17.2	5	31.0	9	17.2	5	29	3.10
Students read books/various texts on their independent level during independent reading time daily in my classroom.	13.8	4	20.7	6	20.7	6	20.7	6	24.1	7	29	3.21
I use the universal screener to form flexible reading groups.	31.0	9	13.8	4	24.1	7	27.6	8	3.5	1	29	2.59
I use the universal screener to assess student reading levels.	24.1	7	6.9	2	20.7	6	31.0	9	17.2	5	29	3.10
I use the universal screener to monitor reading growth.	24.1	7	6.9	2	20.7	6	27.6	8	20.7	6	29	3.14
Total												29
No Responses												7

Table A9. Respondents' Perceptions of Their Literacy Empowered Instructional and Student Practices in HISD, 2017–2018

Instructional and Student Practices	Strongly Disagree		Disagree		Somewhat Agree		Agree		Strongly Agree		Total	Weighted Average
	%	n	%	n	%	n	%	n	%	n	n	
My students write for authentic purposes using varied content, audiences, and modes.	10.3	3	6.9	2	24.1	7	37.9	11	20.7	6	29	3.52
My students are able to archive written work with portfolios.	10.3	3	20.7	6	27.6	8	27.6	8	13.8	4	29	3.14
My students analyze their work using rubrics.	6.9	2	13.8	4	20.7	6	41.4	12	17.2	5	29	3.48
My students utilize writing as a tool for learning.	7.1	2	7.1	2	14.3	4	53.6	15	17.9	5	28	3.68
I use open-ended questions and talk to facilitate discourse in my classroom.	3.5	1	0.0	0	20.7	6	37.9	11	37.9	11	29	4.07
I employ structured conversation that focuses on content and cognition in my instruction.	3.5	1	3.5	1	13.8	4	48.3	14	31.0	9	29	4.00
In my classroom, dialogic discourse takes precedence over monologic discourse.	6.9	2	3.5	1	24.1	7	44.8	13	20.7	6	29	3.69
Total												29
No Responses												7

Table A10. Survey Responses on Literacy Empowered Preparation and Support, HISD, 2017–2018												
Preparation and Support	**Strongly Disagree**		**Disagree**		**Somewhat Agree**		**Agree**		**Strongly Disagree**		**Total**	**Weighted Average**
	%	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**n**	
The information I learned during the Literacy Empowered summer training (s) prepared me for the implementation of Literacy Empowered in my classroom.	10.3	3	13.8	4	27.6	8	31.0	9	17.2	5	29	**3.31**
The leaders on my campus provide valuable support and information about best literacy practices in the content areas.	10.3	3	24.1	7	17.2	5	37.9	11	10.3	3	29	**3.14**
Total											**29**	
No Responses											**7**	

Table A11. Survey Reponses on LE and HISD Curriculum and Instructional Framework, 2017–2018														
Curriculum and Instructional Framework	**Strongly Disagree**		**Disagree**		**Somewhat Agree**		**Agree**		**Strongly Agree**		**N/A**		**Total**	**Weighted Average**
	%	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**n**	
The structure and framework of the HISD secondary core content master courses facilitate ease of planning.	3.5	1	20.7	6	17.2	5	48.3	14	6.9	2	3.5	1	29	**3.36**
The instructional strategies outlined in the HISD secondary core content master courses provide support for my instructional planning and delivery.	3.5	1	13.8	4	31.0	9	34.5	10	13.8	4	3.5	1	29	**3.43**
Total													**29**	
No Responses													**7**	

	Table A12. Summary of Survey Responses Related to Additional Training Required to Implement LE, HISD, 2017–2018		
Code	**Themes**	**# of Respondents**	**Responses**
BP	More Best Practices	2	• I would like to continue to receive best practices in Literacy Empowered. • Hand on, not speech.
TTI	Time to Implement	4	• Class time to implement use of library books. • For campus administrators to allow us to use what was taught at the Literacy Empowered trainings instead of doing STAAR prep pushed on us by TDSs. • Actual planning time to incorporate it.
MT	More Training	9	• A follow-up from last summer. • Support special education like SPED and ESL. • Whatever is the next step. • More literacy Empowered training. • If we adopt new textbooks, a PD regarding the textbook would be helpful. • I would have appreciated clear directions during LE, last summer, stating THIS IS REQUIRED not, THIS IS SOMETHING THAT YOU CAN USE IN YOUR CLASSES. It would have made my school much easier instead of having to switch in midstream. For high school, we need a DAY on organizing and working in stations with classes OVER 30. • I need more training in implementing daily uninterrupted reading. • How to incorporate reading time/reading logs without straying from the math curriculum. Maybe a recommendation of books on math topics. • More training in Language Live/Achieve 3000.
Res	More Resources		• More digital resources.
NA	No Assessment/None	10	• NA, N/A • n/a • None • nothing • I don't know. • none at this time.
AC	Accolades	1	• The QTEL training was very good.

Codes	Theme	# of Respondents	Responses
Table A13. Survey Responses on Improvement in HISD Master Courses to Support Literacy Empowered Implementation, 2017–2018			
BP	More Best Practices	2	• I would like to continue to receive current strategies to utilize that are successful to further support literacy implementation. • Literacy strategies incorporated in curriculum/reading resource to serve Tier I, II and III students.
TTI	More Time to Implement	2	• It's hard to say because I am part of an Achieve 180 school, teaching three preps. It was hard to find time to go through the master lessons to see what they required and how to make adjustments for my scholars.
NSBT	More Specific Needs-Based Training	3	• Something geared to the unique needs of Early College students. • Realistic pedagogy in addressing multiple levels in a classroom including ELL, SPED, GT, and students with achievement gaps but who are not SpEd. • Student friendly language.
MT	More Training		• Ongoing training and part of the curriculum and lesson planning.
TApp.	Team Approach	1	• This is a hard question. Some of the lessons are formulaic and too short. They also seem repetitive, as if one person is writing them, using his or her own personal best strategies. It would be beneficial to have more people creating the lessons.
Res	More Resources Needed	1	• I want more text variety
NA	No Assessment	6	• Not sure • NA (2) • None (2) • I have no clue at present

Appendix B

Literacy Empowered Initiative

Lesson Walkthrough and Observations

English I Classroom

Date: May 17, 2018   Time: 9:45–11:20

The following objective as shown in Figure B1 was inscribed on the whiteboard:

Lesson Objectives: The students will be able to utilize three big questions to guide thinking and improve comprehension of informational text.

Do Now: Brain Dump - Elephants - (5 mins).

Agenda: Discuss now – (5 mins.).

1. Create three big questions chart (as a class) – (20 mins.).

2. Create chart in group – (30 mins.).

3. Read and answer question, "Can Elephants Jump?" – (30 mins.).

Procedure:

The teacher placed the three big questions on chalk board and on a flipchart.

1. What surprised me?

2. What did the author expect me to already know?

3. What changed, challenged, or confirmed what I thought I knew?

Figure B1. Overview of LE Lesson with Objective and Agenda.
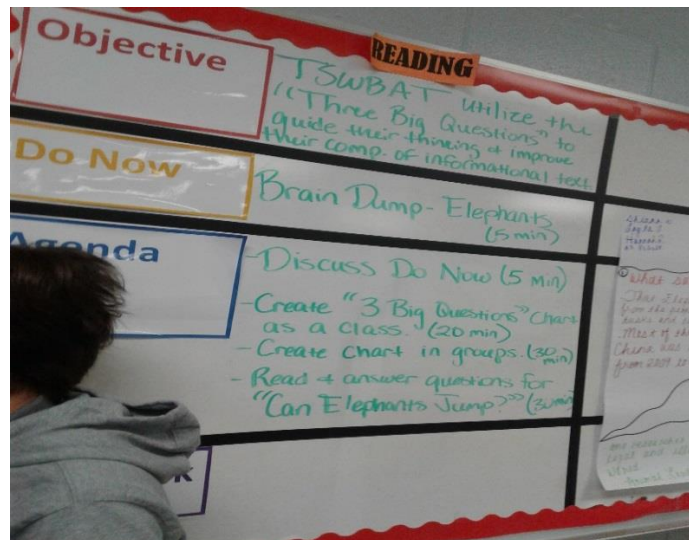
Students were asked to rea to read the article, "Can Elephants Jump?" or they asked their peers to read. The Three-Big-Questions chart was completed as a class. Figure B2 presents the chart.

Figure B2. Class Chart for Three-Big-Questions on "Can Elephants Jump?"
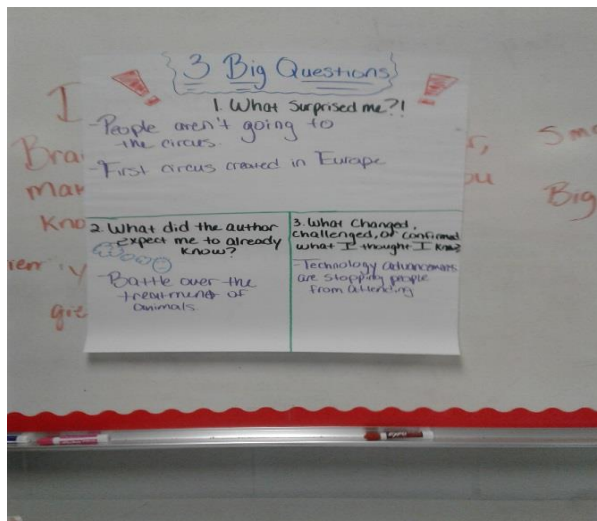
Students were then asked to organize themselves into groups and complete the chart using the three big questions as their guides. Figure B3 shows the chart for one of the groups.

Figure B3. Group Chart for the Three-Big-Questions on Elephants Observed During Literacy Empowered Walkthrough
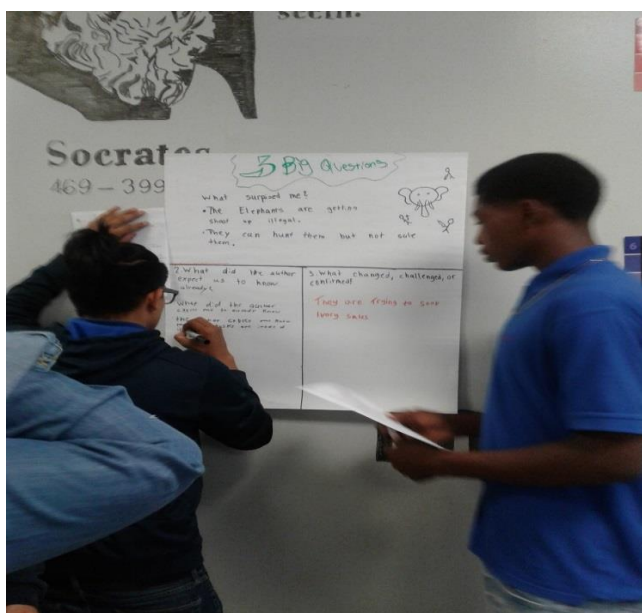
Observation:

- The teacher clearly outlined the lesson objective, and the agenda or task students needed to undertake to accomplish the objective.

- The teacher demonstrated the task, working with the whole class, that students needed to accomplish, and how.

- Students understood the task and were able to replicate the expectation and meet the objectives of the lesson working in groups.

- The read aloud was a useful integration into the lesson to demonstrate fluency and one strategy for teaching comprehension.

- It would have been ideal if students were allowed to read the article before the class to improve their comprehension through re-reading. The teacher could have used students' prior knowledge of circus and circus animals to establish context and provide a more concrete discourse on the issue of animal cruelty, rights, and advocacy.

During the walkthrough a sample of students' writing portfolios were reviewed. Figure B4 shows the portfolios.

Figure B4. Portfolios of Students' Writing Observed During Literacy Empowered Walkthrough

The review of the portfolios found that:

- They were neatly shelved and contained in folders. Evidence of grading was present, but the grading rubrics and feedback were not visible.

- The information to parents on assessment forms were unsigned.

- Evidence of the use of the writing process that demonstrated progressive development from drafts to final publishable writing pieces was not apparent.

Lesson 2

Literacy Empowered Initiative

Lesson Walkthrough and Observations

English 4 Classroom: Advanced Placement Literature and Composition

Sustained Silent Reading

Date: May 17, 2018   Time: 12:30 –1:30

Lesson Objective: Demonstrate English comprehension and expand reading skills

Lesson Procedure:

- Students were organized into table groups and were asked, in those groups, to read two creation myths for comparing creation myths.

- Students were asked to use anchor charts on wall and record information on orange butcher paper for 10–15mins.

- The teacher had three sheets with the words, "Must Have," "Might Have" and "Will Not Have" as shown in Figure B5 posted on the whiteboard to guide the assignment. Students were asked to volunteer answers to complete three blank anchor charts.

Figure B5. Replica of Anchor Charts Displayed on Whiteboard

Must Haves	**Might Have**	**Will Not Have**
• Gods • Creation • Beginnings • Theme Students added when asked • Myths • Storyline • Messages • Characters • Middle	• Characters • Settings • Message • Emotions	• Time • Different Gods (Why? Culture) • Imaginations • Different roles • Truth -reality (evidence-based??) • Myth-fake

Table task was assigned - 5 mins

Required Action:

- Create a creation myth – write your own myth

Figure B6. Guiding Questions for Class Activities on Creation Myths, 2017–2018
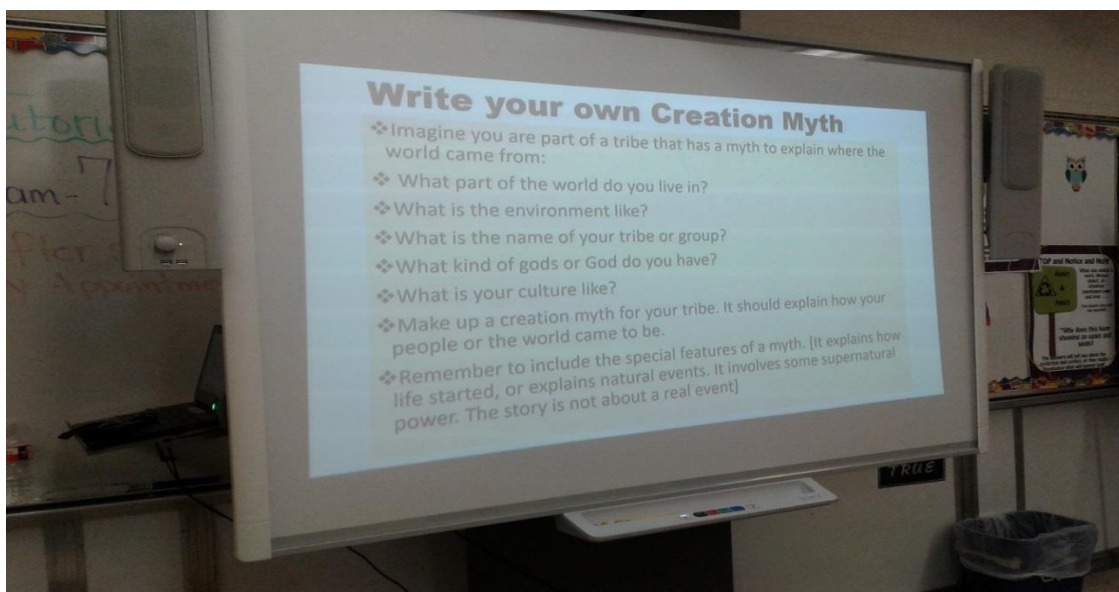
Walkthrough Observations

- Students may have required more thinking time to collaborate and create their own myths and a step-by-step approach over an extended period.

- There appeared to be no books or classroom library, "Saddle-back" or "Just Right" books.

- The teacher was unable to keep students' attention. They were observed to be talking to each other while the teacher spoke, playing while the teacher was presenting the task.

- The teacher quizzed students about their perception and understanding of a myth.

- Students volunteered responses for the anchor charts rather than being called on to provide responses. This created uneasy lulls in the delivery.

- There were several other reading charts throughout the class:
  o Word gaps and quoted words,
  o Stop, notice, note charts, and
  o Ideas and organizations.

- Students appeared to be using several reading and comprehension strategies during the table task:
  o Annotation of information and reading,
  o Use of index cards (some students),
  o Highlighting texts in the article, and
  o Discussion among peers.

Appendix C

Table C1. Distribution of Students in the LE Sample by Key Demographic and Educational Attributes, 2017–2018

Attribute		Sample (9th – 12th Grade)		District (All Grades)
		Treatment	Control	
		n = 10,277	n = 26,807	n = 214,175
Gender	Female	50.5	51.7	50.7
	Male	49.5	48.3	49.3
Ethnicity	Asian	2.5	5.4	4.1
	Black	31.3	24.3	24
	Hispanic	60.9	54.5	61.8
	White	4.3	14.0	8.7
ESL	No	76.7	88.3	31.5
	Yes	23.3	11.8	68.5
Economically Disadvantaged	No	15.6	31.7	24.1
	Yes	84.4	68.3	75.9
At Risk	No	20.9	36.3	28.4
	Yes	79.1	63.8	71.6
Special Ed	No	96.4	96.9	92.8
	Yes	3.6	3.1	7.2
G/T Identification	No	89.6	81.7	84.3
	Yes	10.4	14.3	15.7

Source: HISD 2017–2018 PEIMS Access Data File; PEIMS. Note: Teffects ra used the exams data from this sample to determine the counterfactual or missing data to measure the LE effect. This method does not require a matched sample.

Table C2. Percentage of HISD Literacy Empowered Student Sample by Course Who Performed At or Above STAAR EOC Approaches Grade Level Standard, 2017–2018

Attribute	n = 10,277	Algebra I	Biology	English I	English II	U.S. History
		n = 2,534	n = 2,420	n = 2,726	n = 2,168	n = 429
Gender	Female	80.4	82.3	60.4	67.5	75.4
	Male	75.8	78.8	45.4	57.7	74.3
Ethnicity	Asian	97.9	79.5	48.9	72.4	54.5
	Black	75.3	80.5	50.7	62.4	81.9
	Hispanic	74.7	79.9	53.6	57.3	69.5
	White	86.1	90.9	61.1	91.8	71.4
ESL	No	80.2	86.4	65.1	77.0	87.7
	Yes	64.5	54.4	15.2	10.1	46.7
Economically Disadvantaged	No	78.5	85.3	64.3	75.4	58.3
	Yes	75.4	79.8	51.4	58.1	76.3
Special Ed	No	77.4	82.0	54.2	63.7	75.9
	Yes	40.4	48.0	18.3	21.4	54.3
At Risk	No	90.4	96.6	87.8	96.3	96.8
	Yes	73.0	76.2	44.3	49.2	71.1
G/T Identification	No	74.5	78.7	48.7	54.7	73.7
	Yes	96.1	96.4	94.2	98.4	100.0

Source: HISD 2018 STAAR EOC Access Data File. Green = ≥ 50 percent; Pink = < 50 percent met Approaches Grade Level standard

Table C3. Average Treatment Effects (ATE) of LE Initiative on 2018 STAAR Algebra I Exam Results, 2017–2018						
Scale Score	Coefficient	Robust Standard Error	z	P>z	[95% Confidence Interval]	
ATE						
Treatment						
(1 vs 0)	-23.7	-11.1	-2.2	0.000	-45.2	-2.3
Potential Outcome Mean						
Treatment						
0	3932.0	7.1	556.7	0.000	3918.1	3945.8

Table C4. Average Treatment Effects (ATE) of the LE Initiative on 2018 Students' STAAR Biology Exam Results, 2017–2018						
Scale Score	Coefficient	Robust Standard Error	z	P>z	[95% Confidence Interval]	
ATE						
Treatment						
(1 vs 0)	-95.0	12.3	-7.7	0.000	-119.1	-71.0
Potential Outcome Mean						
Treatment						
0	4155.7	7.2	576.9	0.000	4141.5	4169.8

Table C5. Average Treatment Effects (ATE) of the LE Initiative on 2018 Students' STAAR English I Exam Results, 2017–2018						
Scale Score	Coefficient	Robust Standard Error	z	P>z	[95% Confidence Interval]	
ATE						
Treatment						
(1 vs 0)	-122.2	10.4	-11.8	0.000	-142.6	-101.9
Potential Outcome Mean						
Treatment						
0	4045.5	6.8	595.6	0.000	4032.2	4058.8

Table C6. Average Treatment Effects (ATE) of the LE Initiative on Students' 2018 STAAR English II Exam Results, 2017–2018						
Scale Score	Coefficient	Robust Standard Error	z	P>z	[95% Confidence Interval]	
ATE						
Treatment						
(1 vs 0)	-48.0	10.0	-4.8	0.000	-67.6	-28.3
Potential Outcome Mean						
Treatment						
0	4058.9	6.7	601.4	0.000	4045.7	4072.2

Table C7. Average Treatment Effects (ATE) of the LE Initiative on Students' 2018 STAAR U.S. History Exam Results, 2017–2018						
Scale Score	Coefficient	Robust Standard Error	z	P>z	[95% Confidence Interval]	
ATE						
Treatment						
(1 vs 0)	-233.9	36.7	-6.4	0.000	-305.8	-161.9
Potential Outcome Mean						
Treatment						
0	4311.1	7.9	544.1	0.000	4295.6	4326.6

Table C8. Selected Predictors of LE Students' Performance on the 2018 STAAR EOC Algebra I Exam, 2017–2018			
Scale Score	Coefficient	Beta	Standard Error
Special Education	-312.3**	-0.14	39.6
G/T Identification	355.0**	0.19	34.4
At Risk	-275.7**	-0.23	23.2
Career and Technical Education	8.6	0.01	10.9
Gender	-65.7**	-0.07	16.2
Economically Disadvantaged	-8.8	-0.01	24.5
ESL	-113.9**	-0.12	19.1
Constant	4148.2**		32.4
R²	0.17		
F	75.9**		

**p. < .001 (two-tailed)

Table C9. Selected Predictors of LE Students' Performance on the 2018 STAAR EOC Biology Exam, 2017–2018			
Scale Score	Coefficient	Beta	Standard Error
Special Education	-276.4**	-0.12	40.6
G/T Identification	334.4**	0.21	27.7
At Risk	-372.3**	-0.32	21.3
Career and Technical Education	15.2	0.02	10.4
Gender	20.6	0.02	16.3
Economically Disadvantaged	-47.6	-0.03	23.7
ESL	-269.6**	-0.22	21.8
Constant	4283.4**		31.1
R²	0.30		
F	152.3**		

**p. < .001 (two-tailed)

Table C10. Selected Predictors of LE Students' Performance on the 2018 STAAR EOC English I Exam, 2017–2018

Scale Score	Model I		Model 2		
	Coefficient	Beta	Coefficient	Beta	Standard Error
Special Education	-341.2**	-0.12	-181.9**	-0.07	30.2
G/T Identification	366.7**	0.22	213.2**	0.13	19.7
At Risk	-324.2**	-0.26	-175.6**	-0.14	15.2
Career and Technical Education	-11.2	-0.02	-5.9	-0.01	7.5
Gender	-129.2**	-0.13	-32.4**	-0.03	11.1
Economically Disadvantaged	-56.1	-0.04	-9.7	-0.01	16.8
ESL	-432.4**	-0.37	-226.3**	-0.19	14.2
Writing Composition			208.0**	0.60	4.4
Constant	4248.6**		3213.3**		31.0
R²	0.42		0.70		
F	276.9**		721.0**		

**p. < .001 (two-tailed)

Table C11. Selected Predictors of LE Students' Performance on the 2018 STAAR EOC English II Exam, 2017–2018

Scale Score	Model 1		Model 2		
	Coefficient	Beta	Coefficient	Beta	Standard Error
Special Education	-409.7**	-0.11	-178.8**	-0.05	38.3
G/T Identification	424.5**	0.27	242.1**	0.15	18.7
At Risk	-380.0**	-0.28	-236.7**	-0.18	16.4
Career and Technical Education	-68.3**	-0.09	-28.2**	-0.04	7.6
Gender	-61.3**	-0.05	-21.9	-0.02	12.1
Economically Disadvantaged	-118.3**	-0.09	-48.3**	-0.03	14.5
ESL	-575.3**	-0.39	-238.4**	-0.16	17.4
Writing Composition			206.1**	0.58	4.7
Constant	4477.6**		3266.7**		33.7
R²	0.60		0.79		
F	471.3**		1024.9**		

**p. < .001 (two-tailed)

Table C12. Selected Predictors of LE Students' Performance on the 2018 STAAR EOC U.S. History Exam, 2017–2018

Scale Score	Coefficient	Beta	Standard Error
Special Education	-414.0*	-0.14	118.6
G/T Identification	460.1**	0.18	105.3
At Risk	-336.4**	-0.23	63.4
Career and Technical Education	28.7	0.05	24.3
Gender	108.7	0.10	42.6
Economically Disadvantaged	114.7	0.06	75.2
ESL	-417.9**	-0.37	47.3
Constant	4112.8**		93.2
R²	0.3		
F	26.3**		

**p. < .001 (two-tailed), *p <.05 (two-tailed)