QEP Impact Report Submitted as Part V of the 5th-Year Interim Report

to the Southern Association of Colleges and Schools Commission on Colleges

1. Goals and Student Learning Outcomes: Summary

A. Topic, Student Success Goals, and Targeted Cohort

Lamar State College-Orange's QEP, entitled "Reading is Simply Everything," or "RISE," is designed to improve success rates for students listing pre-Licensed Vocational Nursing (PLVN) as their major. Success for this cohort could involve graduation from either the Licensed Vocational Nursing (LVN) program or from the Registered Nursing (RN) program, for which the LVN program forms the basis, with subsequent secure employment as a productive member of a highly skilled workforce.

The PLVN sequence of courses is not actually a program earning a credential upon completion, but a set of four academic courses in biology and psychology and one course in Basic Nursing designed to prepare students for entry into the LVN program, a technical program with limited enrollment accredited by the Texas Board of Nursing. Students compete for the available positions, with points earned on the basis of GPA and scores on the Test of Essential Academic Skills (TEAS), a standardized, nationally normed proficiency exam.

B. Enhancement Plan Teaching and Training Components

The overarching goal of the LSC-O QEP is to help students secure licensure enabling them to pursue lucrative careers in the prestigious field of professional nursing. Institutional research indicates that most students admitted to LSC-O are first-time, first-generation college students, and fewer than 50% of incoming students read at college level. To achieve this overarching goal, the RISE team seeks first to improve students' reading and vocabulary proficiency and metacognitive awareness, enabling them to persist and successfully complete their coursework, gain entry into the program(s) of their choice, complete their program(s), and secure licensure to practice nursing in Texas. The RISE plan seeks to mitigate the obstacles to success facing the targeted cohort by simultaneously implementing complementary reading-specific initiatives.

Initiative 1: Curriculum and Instruction Redesign for EDUC 1300 Learning Frameworks (implemented Spring 2015)

All students admitted to LSC-O without prior college credit are required to enroll in EDUC 1300, Learning Frameworks. The RISE Director collaborated with the Director of the Education and Mathematics Division to designate two sections of EDUC-1300 each fall semester and one section each spring semester, labeling them on the printed and online schedules as being intended for PLVN students and collaborating with advisors to populate them with PLVN students. The curriculum in each designated section was compacted and redesigned by the RISE Curriculum and Instruction Specialist (CIS) to interweave 20 contact hours of reading enhancement instruction into the 48-contact-hour course. Students in these designated sections of EDUC 1300 constituted the RISE cohort.

Initiative 2: Curriculum and Instruction Redesign for PLVN Support Courses, LVN Program Courses, and RN Courses

Beginning in the fall semester of the first full academic year of RISE implementation, instructors in courses required for entry into the LVN program began teaching reading enhancement strategies and techniques in their courses, which were largely populated by PLVN students. An 8-hour training session was offered in April of the RISE pilot semester for volunteer faculty teaching PLVN support courses and LVN program courses, teaching them reading enhancement principles, strategies, and techniques and helping them redesign their course curricula to strategically embed two contact hours of reading enhancement instruction as scaffolding for major assignments, interspersed throughout the course in

15-20-minute increments, to strengthen students' critical and analytical reading skills and increase metacognitive awareness of their strategic reading practices. Additional training in Summer 2017 was offered to instructors in the Registered Nursing program, who implemented the RISE paradigm as an enhancement to their curriculum and instructional methodology. The plan also included provisions over the course of its implementation for expansion into other programs, with training extended to all interested faculty teaching in the College's General Education curriculum.

Plan-Specific Goals, Student Learning Outcomes, Measures, and Instruments

Plan authors identified two reading-focused, cohort-specific goals and four closely related Student Learning Outcomes (SLOs), and selected appropriate measures capable of quantifying student performance and metacognitive awareness of a range of reading skills and strategies. As the SLOs are derivatives of the goals, the numerical targets for achievement identified in the goals distribute to the SLOs.

Goals:

- 1. 70% of students completing the plan's curriculum and receiving at least 20 contact hours of RISE instruction will demonstrate the ability to read and comprehend college-level texts. More simply stated, 70% of students receiving a minimum designated amount of enhanced instruction through the plan will read at college level, grade thirteen (13).
- 2. 70% of students completing the plan's curriculum and receiving at least 20 contact hours of RISE instruction will demonstrate an increase in the proficiency of comprehension, fluency, and critical and analytical reading skills in college-level texts and materials. More simply stated, 70% of students receiving a minimum designated amount of enhanced instruction through the plan will demonstrate improved reading skills.

Student Learning Outcomes

After completing the course of study for the Pre-LVN series of courses, students will:

- 1. read and comprehend college-level materials for a variety of purposes;
- 2. select and use reading strategies appropriate to content and purpose;
- 3. monitor the effectiveness of their own comprehension strategies and adjust them as needed; and
- 4. increase the proficiency of comprehension, fluency, and critical and analytical reading skills in college level texts and materials.

Assessment Methodology, Instruments, and Specific Measures

Pre- and post-instructional testing was administered to students in the RISE cohort in designated EDUC 1300 courses and in an EDUC section identified as a control group. On a phased implementation schedule, pre-and post-instructional testing was also completed in PLVN pre- and co-requisite support courses (BIOL 1322 Nutrition, PSYC 2314 Lifespan, BIOL 2301 Anatomy and Physiology I, and BIOL 2302 Anatomy and Physiology II). Results of testing used to screen applicants to the LVN program at the conclusion of the PLVN course of study were analyzed to determine the impact the plan had on student success to that point. LVN nursing program instructors were also trained in curriculum compaction and reading enhancement instructional strategies and employed the RISE paradigm in the LVN program; therefore, the results of the NCLEX® licensure exams were also included as a direct measure of the RISE initiative's overall success goal. Finally, since the RN program instructors also employ the RISE paradigm, the results of NCLEX® testing administered to students completing the Registered Nursing program are used as a direct measure of overall student success at that ultimate exit point.

2. Changes Made to the QEP and Associated Rationales

Many evolutionary changes to the RISE initiative were built into its graduated implementation schedule: the number of sections of EDUC 1300 dedicated to building the RISE cohort was increased to two per semester in 2015-2016, and the RISE instructional and assessment paradigm was implemented in support courses in Spring 2016; training was expanded to include nursing and general educational faculty and their

associated courses in 2016-2017. Other minor adjustments and expansions were also implemented according to the schedule approved by the Commission in Spring 2015. However, in seeking improvement, the RISE team made other unanticipated changes driven by analysis and interpretation of the results of assessment.

- After the Spring 2015 pilot semester, the Reading Survey developed collaboratively by the RISE Curriculum and Instruction Specialist and her colleagues was replaced with the Metacognitive Assessment of Reading Strategies Inventory (MARSI). The original survey was clear, easy for the students to complete, and designed to address the RISE SLOs, but the classification of items in the MARSI also correlated very closely with the RISE SLOs, while the instrument has been widely validated by use in numerous studies, and the rating scale for interpreting student responses allowed the RISE data analysis team to more effectively quantify results of assessment than was feasible with the originally developed Reading Survey.
- In evaluating the results of assessment for the QEP's second full year of implementation, 2016-2017, where EDUC 1300 cohort students, support course students, and control groups were being assessed, analysts noted an unexpected phenomenon. Whereas the plan's analysts expected post-instructional test scores and inventory responses to be higher than pre-instructional test results, or at least approximately the same, in a high percentage of cases the post-instructional test and inventory scores were significantly lower than pre-instructional scores for the same students. The instructors in those courses attributed the unexpected results to two possible causes. First, the grades on the assessments were not factored into the course grades, so students had little incentive beyond self-esteem to motivate high performance. Second, post-instructional assessments were administered in several cases during the final week of the semester, when the pressure of other work was high. To address these correlating factors, the team strongly urged participating faculty to provide some meaningful incentive to motivate student performance, and to set up testing windows to assure that pre-instructional testing took place as near to the beginning of the semester as possible (to provide the maximum allowable time between pre- and post-instructional assessment, allowing students to learn and apply the enhancement strategies taught during the course of the term before post-instructional assessment administered at the end of the term) and to assure that post-instructional testing would not overlap with major assignments often due at the end of the term. These recommendations were shared with participating faculty and implemented in Fall 2017.
- Also in reviewing results of assessment for 2016-2017, RISE team members noted that post-instructional Nelson-Denny test scores were not meeting the plan's first goal, which was that 70% of students completing a minimum of 20 hours of RISE instruction would read at college level. Students were reaching the 20-contact-hour threshold at the end of their first semester in college, and the Nelson-Denny Form H test was the assessment whose results informed the determination of the plan's accomplishment of Goal 1. The RISE CIS offered the interpretation that the interval ensuing between pre- and post-instructional testing—approximately twelve weeks—was insufficient to allow first-time LSC-O students with reading challenges to learn, apply, practice, and master the enhancement strategies and to develop the metacognitive awareness the RISE initiative sought to inculcate. The team therefore raised the Goal 1 threshold at which students could be expected to read at college level from 20 contact hours of RISE instruction to 24 contact hours of instruction, with the extra four contact hours coming from instruction embedded in support courses, in an effort to interpose at least one semester between students' initial exposure to RISE instruction and the time at which they could be expected to have mastered the principles, strategies and techniques taught and demonstrate college-level level reading proficiency.
- In viewing the results of assessment for 2017-2018, RISE analysts observed that the efforts of participating faculty to incentivize student performance on post-instructional testing had not achieved the desired results. Most of the faculty who had adjusted their testing paradigms had simply offered extra credit for students who completed the assessments. One faculty member stipulated that extra credit would only be given to students whose post-instructional test scores showed an increase over the pre-instructional counterpart, but in general the data suggested that the discrepancy noted the year before between pre- and post-instructional test scores was no less pronounced than prior to implementation of incentivizing measures. The RISE team postulated testing fatigue, since some of the students were completing identical versions of both pre- and post-instructional assessments in two or more classes during the course of a single semester, one set in each class in which RISE instruction was being offered. To resolve this unacceptable situation and clarify the data stream, the RISE team

agreed to discontinue all pre- and post-instructional testing in BIOL 1322 and PSYC 2314, and conduct pre-instructional assessment only in BIOL 2301 and post-instructional assessment only in BIOL 2302, which not only reduced the volume of testing but necessarily interposed two semesters between the administration of the pre-instructional test and the administration to the same student of the post-instructional test. This change was implemented in Spring 2018.

- At the conclusion of the plan's implementation schedule, two changes were deemed necessary:
 - in Fall 2019, because saturation was such that only a statistically irrelevant sample of students could be identified in the group of students in the support courses who had not received any RISE instruction, control group testing was discontinued (this was a change originally planned for implementation in 2017-2018, but the RISE team decided at that time to continue testing control groups)
 - in Spring 2020, RISE assessments in EDUC 1300 and BIOL 2301 were discontinued, as RISE implementation would conclude before students in those courses could reach the 24-hour threshold necessary to meet RISE goal achievement parameters currently in place.

3. Achievement of Identified Goals and Outcomes, and Unanticipated Outcomes

Instrument for Assessment of Success Measure 1: Entry into the LVN Program

Because it does not provide a reading grade level equivalency, a vocabulary score, or other data comparable to the information provided by the two Adult Reading Tests used by the RISE team for assessing reading-specific SLOs, the Test of Essential Academic Skills (TEAS) was not employed as a direct measure of student learning outcomes for reading proficiency. However, because the TEAS test has long been employed as a screening instrument for students seeking entry to the LVN program, it was an excellent instrument for assessment of the impact RISE had on completion, as the College has baseline data from 2009 against which to gauge cohort performance. TEAS tests are scored by the vendor. One record per exam per student was recorded.

Instrument for Assessment of Success Measure 2: Licensure at LVN and RN Levels

As was the case with the TEAS, because it does not provide a reading grade level equivalency, a vocabulary score, or other data comparable to the information provided by the two Adult Reading Tests used by the RISE team for assessing reading-specific SLOs, the National Council Licensure Examination (NCLEX®) was not used as a direct measure of SLOs for reading proficiency. However, the exam was employed as a direct measure of RISE student success in the LVN and RN programs, as students who pass the exam at each level are eligible to become licensed to practice nursing in Texas. The College and the Nursing program accreditors place great emphasis on these test scores to gauge program effectiveness and a student's readiness to succeed in a highly skilled workforce, so the RISE team also used NCLEX® scores to gauge cohort performance and the impact of the QEP on student success in these marquee programs. NCLEX® tests are scored by the vendor. One record per exam per student was recorded.

Instruments for Assessment of Reading Skills for Cohort Students Only

At the outset of the pilot semester, Spring 2015, the RISE team selected the Nelson-Denny Reading Test (NDRT), Forms G and H, to be administered as pre- and post-instructional assessments in EDUC 1300. These timed, standardized, nationally normed assessment instruments' competency-specific components include vocabulary, comprehension, an overall assessment of student reading proficiency, and a grade level assessment with raw score, percentile, and stanine scores enabling RISE data analysts to assess fluency, comprehension, and reading grade level. The NDRT was administered pre- and post-instructionally and hand scored by the LSC-O Testing Center staff. Nine records per test per student were recorded.

Instruments for Assessment of Reading Skills for Students in PLVN Support Courses

During the semester prior to the second full year of implementation, the RISE team chose the Gates-Macginitie Adult Reading Test (GMRT), Forms S and T, to be administered as pre- and post-instructional assessments in PLVN support courses to students in the cohort and to those who had not received the 20hour enhancement instruction in EDUC 1300. The GMRT is also a timed, standardized, nationally normed instrument with components assessing the same competencies as the NDRT and yielding assessments that can be compared to those from the NDRT. The GMRT was administered by instructors in their classrooms pre- and post-instructionally and hand scored by the RISE Director. Nine records per test per student were recorded.

Instruments for Assessment of Metacognitive Awareness of Reading Skills for All Cohort and PLVN Support Course Students

To assess the elements involving the selection and use of reading strategies and the self-monitoring and adjustment of their own comprehension strategies, the RISE team initially used a survey as an indirect measure of student metacognitive awareness of reading skills. The survey was developed by the RISE CIS in collaboration with other experts in reading instruction. Survey items addressed each of the identified elements in SLOs 2 and 3, as well as being one of the assessment measures for Goal 2. The survey was to be administered as a pre- and post-instructional assessment. In the first full year of RISE Implementation, the survey was replaced by the Metacognitive Awareness of Reading Strategies Inventory (MARSI), developed by Mokhtari and Reichard and published in the Journal of Educational Psychology 94.4 (2002) as a tool since widely validated and applied. The Reading Survey and the MARSI were administered pre- and post-instructors in their classrooms and hand scored by the RISE Director. Four records per survey or instrument per student were recorded.

Archiving and Retrieval of Data

Archiving of assessment results was completed by the RISE Director in Banner 9, the College's Student Information System, using test codes developed by the College Registrar. Banner reporting extracted the data after archiving was completed for each plan year, and the results of that reporting extracted into an Excel workbook for analysis and interpretation by a RISE data analysis team.

Data was analyzed for the following four groups:

- Control Group: students who received no RISE instruction (graphed in gray)
- Students who completed 20 hours of RISE instruction in EDUC 1300 (graphed in green)
- Students who did not receive RISE instruction in EDUC 1300 but did receive RISE instruction in at least one supporting course (graphed in orange)
- All students who received RISE instruction in both EDUC and support courses (graphed in **gold**)

Assessment Measures and Achievement by Goal and SLO

Overarching Program Goal: Student Success

Success Measure 1: Entry into the Licensed Vocational Nursing Program

Instrument Employed

• Test of Essential Academic Skills (TEAS)



Instrument Employed:

LVN Program Entry Qualification (TEAS) for All Years: The TEAS cannot be correlated to a reading grade level or to comprehension level, according to the vendor, but it is a direct measure of success for students in the cohort and was recommended for use as a measure by the on-site review team at the institution's 2015 decennial review. RISE Every cohort receiving instruction outperformed the historical baseline pass rate.

Success Measure 2: Licensure to Practice Nursing in Texas

NCLEX® PN (Vocational Nurse), RN (Registered Nurse) exams

NCLEX[®] Results--LVN and RN Licensure Examinations 100 95 90 pass rate 85 % 80 NCLEX-PN 75 plan implementation year NCLEX-RN 70 2015 2017 2016 2018 2019 NCLEX-PN 86.24 80.39 85.83 97.12 85.16 NCLEX-RN 80 86.84 87.5 92.68 95.45

The NCLEX ® test cannot be correlated to a reading grade or comprehension level. according to the vendor, but it is a direct measure of success for students in the cohort, and was recommended for use as a RISE measure by the on-site review team at the institution's 2015 decennial review. RISEera students (2017 - 2019)outscored the pre-RISE students on the NCLEX-RN® by 15.45%, although results for the NCLEX-PN® were less conclusive.

Interpretation of Assessment: Overarching Program Goal, Student Success (Measures 1 and 2)

The overarching RISE program goal of Student Success was met. The cohort group outperformed the historical baseline for TEAS testing by 7.4%, and all other cohorts with a sample size large enough to be statistically relevant.

Reading-Specific Goal 1: 70 % of Students Will Read and Comprehend at College Level (grade 13) SLO 1: College-level Reading and Comprehension

and

Student Learning Outcome 1: After completing the course of study for the Pre-LVN series of courses, students will read and comprehend college-level materials for a variety of purposes. (Goal 1 and SLO 1 employ the same assessment measures and instruments.)

Instruments Employed:

- Nelson-Denny post-instructional tests, comprehension and grade level; and
- Gates-MacGinitie post-instructional tests, comprehension and grade level



Interpretation of Assessment: Reading-Specific Goal 1 and Student Learning Outcome 1

Reading-Specific Goal 1 and Student Learning Outcome 1 were partially met, as members of the cohort group (having received 20 or more hours' reading enhancement instruction) and testing in support courses using the GMRT post-instructional form exceeded the 70% threshold for college-level reading comprehension, but the cohort group did not meet the 70% standard for total score grade level threshold. However, even though the primary cohort did not achieve the 70% threshold of college-level reading skill as measured by post-instructional testing, both other groups of students receiving RISE enhancements exceeded the 70% threshold. In addition, the cohort group outperformed the control group in GMRT post-instructional assessment of reading comprehension level by 9.6%, 87.00% for the RISE cohort compared to 77.4% for the control group.

Reading-Specific Goal 2: Students Will Show Improvement in Reading

and

Student Learning Outcome 4: Students Will Increase the Proficiency of Comprehension, Fluency, and Critical and Analytical Reading Skills in College Level Texts and Materials.

Instruments Employed:

- Nelson-Denny comprehension: pre- and post-instructional tests, raw scores;
- Gates-MacGinitie comprehension: pre- and post-instructional tests, raw scores;
- Nelson-Denny vocabulary: pre- and post-instructional tests, raw scores;
- Gates-MacGinitie vocabulary: pre- and post-instructional tests, raw scores; and
- MARSI, pre- and post-instructional assessments, problem-solving mean (individual scores; comparisons for each grouping)



Interpretation of Assessment: Reading-Specific Goal 1 and Student Learning Outcome 1

Reading-Specific Goal 2 and Student Learning Outcome 4 were partially met. The 70% threshold for improvement was met in Comprehension by the cohort group on the Nelson-Denny Test and in Critical and Analytical Reading Skills by the cohort group on the MARSI assessment.

Student Learning Outcome 2: Select and Use Reading Strategies Appropriate to Content and Purpose

Instruments Employed:

MARSI Post-instructional Assessment: Global Strategies Score Mean



Interpretation of Assessment: Student Learning Outcome 2

Student Learning Outcome 2 was met; students in the cohort group met or exceeded a 3.5 on the MARSI Global Strategies Score Mean.

SLO 3: Self-monitor and Adjust Comprehension Strategies

Instrument Employed:

MARSI Overall Score Mean



Student Learning Outcome 3 was met. Students in the cohort group exceeded a 3.5 on the MARSI.

4. Reflection on What the Institution Has Learned as a Result of the QEP Experience

- The first unexpected learning the RISE team encountered was the difference in preparation and basic competency that apparently exists between entering cohorts comprising different majors, as indicated in the disparity between pre-instructional Nelson-Denny Adult Reading Test scores for the PLVN cohort students enrolled in their designated sections of EDUC 1300 and the control group of EDUC 1300 students, comprised of a more random mixture of mostly academic students. The control group's pre-instructional test scores were consistently higher than the RISE cohort scores, and for all years, the mean pre-instructional reading grade-level score for the control group was 11.47, as opposed to 10.44 for the cohort group, signifying that on average, students in the control group for all years came into their programs reading at more than an entire year's grade level higher than their RISE cohort counterparts. If reading proficiency testing were to become a normal part of the EDUC 1300 curriculum, the pre-instructional assessment data might be useful in crafting curricular initiatives like RISE to enhance reading proficiency in other programs where similar gaps might be revealed.
- Upon investigating the success rates for RISE students, the RISE team learned that graduation rates for PLVN students during the RISE era were higher than those for the pre-RISE era. Students entering the PLVN program in Fall 2015 would not have received any RISE training until the end of their LVN coursework, if then (depending on their persistence). Students entering in Fall 2016 would have received RISE training throughout their course of study, both through their pre-LVN courses and during their LVN program as well, program, where the RISE paradigm was implemented in Fall 2017. In 2015, before RISE was implemented, the graduation rate for PLVN students entering and eventually graduating from the LVN program was 17%. In the two years following, after RISE was implemented, graduation rates for students entering as PLVN majors and graduating two or three years later from the LVN program rose to 28% and 29%, respectively, a gratifying 11-12% increase.
- Another valuable learning involved the importance of interdepartmental communication and advance scheduling of reminders to keep implementation on target. Everyone involved in implementing the plan learned that methodical adherence to a detailed schedule was crucial to efficient implementation.
- The RISE team members learned the importance of flexibility, resolve, and willingness to seek collaborative solutions to unexpected problems. When catastrophic flooding from Tropical Storm Harvey forced the College to temporarily close in Fall 2017, and when the same thing happened again in Fall 2019 with Tropical Storm Imelda, it was necessary to adapt the RISE assessment paradigm to accommodate relocated instruction. When COVID-19 prevented face-to-face testing in Spring 2020, the College staff collaborated with the vendor to create a version of the Gates-Maginitie Adult Reading Test that had not previously existed, which could be deployed on Blackboard as a course-embedded quiz without compromising its integrity as a nationally normed assessment.
- Perhaps the RISE team's most surprising discovery was the extent to which pre- and post-instructional testing could be unrevealing, and in fact misleading, when students do not perceive it to be relevant. In the post-instructional testing in both EDUC 1300 and PLVN support courses, many individual students' post-instructional test scores *decreased* after receiving instruction; when the RISE team recommended that reading assessment should be treated as a proportional factor in course-level assessment, participating faculty resisted, insisting that they were not reading teachers and did not feel comfortable assessing their students' learning in that competency. If curricular initiatives like RISE (writing across the curriculum, for example, or information literacy) are to be embedded in other programs and successfully assessed using a pre- and post-instructional testing paradigm, this problem will have to be addressed and its effects in some way attenuated. This unexpected learning will prove invaluable during the training, planning, and early implementation phases of future curricular initiatives.
- Finally, the RISE team learned the extent to which faculty and staff members can be motivated by their own teaching and service values to contribute unremunerated effort to a demanding project. Twentyeight full-time faculty members in education, vocational nursing, registered nursing, history, English, psychology, biology, and criminal justice voluntarily underwent an intense-8-hour training on their own time and spent an estimated 20 hours compacting their course curricula and preparing new instructional material to pilot the RISE paradigm in their courses, all without stipendiary remuneration. Participants received no formal recognition, and no reward except for the satisfaction of knowing they were helping students to achieve a level of self-sufficiency and dignity that had eluded them until they came to Lamar State College - Orange.