Introduction

The Online Senior Assessment (OSA) was designed in 2008 to assess general education knowledge and abilities. In fall 2014, Texas Tech University (TTU) revised their core curriculum in compliance with the new Texas mandated core curriculum. It is important to note that this OSA administration does not reflect the current Texas core curriculum objectives and was meant to gather data on senior students that entered TTU under the previous core curriculum requirements.

The OSA consists of 32 knowledge-based questions from the following core curriculum areas: Humanities, Multicultural, Mathematics, Natural Sciences, and Social and Behavioral Sciences.

The instrument has one section for each of the following core areas:
- Humanities: 4 knowledge questions
- Multicultural: 7 knowledge questions
- Mathematics: 5 knowledge questions
- Natural Sciences: 6 knowledge questions
- Social and Behavioral Sciences: 10 knowledge questions

Instrumentation

The OSA was administered for the sixth time during the Spring 2017 semester between April 3rd and May 1st through use of the Qualtrics online survey program. The survey invitation was sent to all TTU senior students with 90 or more credit hours, an identified 3,104 students or 32% of the senior population. As an incentive for participating in the survey, two of the participants were randomly selected to win a $500 scholarship toward tuition and fees. As part of the data vetting process, entries which were submitted within five minutes or less of starting the assessment were removed from the final data pool as this indicated students simply clicking through the assessment. Of the targeted population and after data vetting, we received an 11.79% response rate, a total sample of 366 students.

The sample consisted of 63.2% female students and 36.8% male students. This represents more female students and fewer male students than what would be expected from the TTU senior population, but the sample was representative in terms of college and ethnicity. The following charts break the participants down by gender, ethnicity, and college.

Chart 1. Sample and Population by Gender
Before starting each core section, participants were asked where they completed their core requirement for that specific area. Credits could be received from dual credit courses, advanced placement, CLEP exam, another institution, or TTU. Chart 4 summarizes the responses. It is important to note that students were able to select more than one source for completing the course requirement for each core area. This data was used to sort students into categories for comparison purposes, discussed in the Results section of this report.
Results

Of the 70 questions the OSA contained, only the 32 questions from Humanities, Multicultural, Mathematics, Natural Sciences, and Social and Behavioral Sciences where one correct answer exists (i.e. knowledge questions) were included in this analysis. The self-assessment questions were excluded since there is no right or wrong answer. Of the 32 knowledge questions, one question was excluded from data analysis due to an error in the administration which caused incorrect answer choices to be linked to the question. As a result, only 31 questions are included in the analysis. The mean score on the OSA was 63.86.

Chart 5 summarizes the overall performance of students (i.e., the percentage of correct answers) with a standard deviation of 15.25.
One of the main questions the OSA can help answer is if students who took their core requirements at institutions other than Texas Tech perform similar to students who took their core requirements at Texas Tech. In this analysis, we compare students who took their core requirements at Texas Tech, referred to as the “TTU” group, to students who transferred in credits for core requirements from elsewhere, referred to as the “Else” group. Since it is possible for the same student to receive credit for one core area at Texas Tech (e.g. Multicultural) and credit for another core area somewhere else (e.g. Humanities), we identified these students as “Mixed”. Overall, 16.12% of students stated that they took all of their courses at Texas Tech, whereas 75.14% were in the Mixed group and 8.74% were in the Else group.

The mean score for the Else group was lowest at 62.09, whereas the TTU group scored a mean of 63.31 and the Mixed group scored a mean of 64.19. This differs from the 2016 administration in which TTU performed highest with a mean score of 63.42, the Mixed group scored a mean of 62.94, and the Else group scored a mean of 60.27.

Chart 6. Overall Performance: TTU vs Mixed vs Else

Below, Chart 7 compares the mean scores of each core curriculum area for the three groups. The lowest performing core area was Mathematics, with a mean score of 56.55, and the highest performing core area was Multicultural, with a mean score of 76.23.
Chart 7. Performance by Core Area

Conclusion
Comparing overall mean scores for students who completed their core requirements at TTU (TTU group) and scores for students who completed their core requirements somewhere else (Else group) show that on average the TTU group scored slightly higher than the Else group (63.31 for TTU vs 62.09 for Else). In comparing the mean scores for the separate core areas, the only area in which the Else group scored significantly higher than the TTU group was Natural Sciences (65.54 for TTU vs 71.88 for Else). The only core area in which the TTU and Else groups scored similarly was Social and Behavioral Sciences (64.89 for TTU vs 63.84 for Else).

In comparing this year’s results to that of last year’s administration, there were several changes in the final data. The overall lowest scoring core area changed from Social & Behavioral Sciences in 2016 to Mathematics in this administration, and the overall highest scoring core area changed from Humanities in 2016 to Multicultural in this administration. The mean score of the OSA increased from 62.75 in 2016 to 63.86 in 2017. Additionally, there was a 5% increase in students who took all of their core curriculum courses at TTU. However, the data also saw a 10.95% increase in the number of students categorized as Mixed. This is potentially attributed to students’ ability to select more than one avenue of receiving core credit and an increasing number of students receiving credit due to Advanced Placement or Dual Credit courses in high school. One piece of information that did remain the same is the Else group continues to perform lowest on the OSA.

Moving forward, a new instrument, branded TechQuest, is currently in development to reflect the new Texas Core Curriculum. The revised core objectives are Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Social Responsibility, and Personal Responsibility. TechQuest is in the process of being vetted by the Core Curriculum Steering Committee.