



**College of Education, Health & Aviation**  
**School of Teaching, Learning & Educational Sciences**  
**Undergraduate Secondary or K-12 Education**  
**Assessment Report Form 2016-2017**

**Date of Report: 9/15/2017**

**Name of Person Submitting Report: Dr. Gayla Foster**

**A. Program Information:**

**Assessment Coordinator's Name: Dr. Gayla Foster**

**Assessment Coordinator's Email Address: [gayla.foster@okstate.edu](mailto:gayla.foster@okstate.edu)**

**Number of students enrolled in the program 2016-2017: 270 students \***

**Number of students graduated in 2016-2017: 64 students**

**B. Program Mission Statement**

**In the box below, provide the mission statement for the program.**

*The mission statement, educational objectives, and goals for program should guide the assessment process. The mission statement should align with department, college, and institutional mission statements.*

The College of Education, Health & Aviation (CEHA) consists of a community of scholars whose mission is to prepare and develop professionals to facilitate life-long learning and enrich the quality of life for individuals in diverse settings. The college leads in the generation of knowledge in our professional areas and advances professional development through teaching, research, and outreach. The broad mission of the School of Teaching, Learning & Educational Sciences (STLES) is to prepare educational professionals to work with diverse populations in various settings. As a community of scholars, we generate knowledge, promote learning and understanding, and foster personal and professional growth through teaching, research, service, and outreach.

The Secondary Education program in STLES is accredited by the Council for the Accreditation of Educator Preparation (CAEP) and leads to a B.S. degree in CEHA or to a K-12 Teaching Certification. To meet national professional accreditation standards as well as state standards of the Office of Educational Quality and Accountability (OEQA), secondary teacher candidates must prepare a professional portfolio whose artifacts demonstrate that a student has made progress toward and achieved the required goals and standards. Secondary teacher candidates who complete the program, the professional portfolio and pass the state certification tests (OGET, OSAT, and OPTE), in their respective field, meet the requirements for an Oklahoma initial teaching license, enabling graduates to teach in grades 6-12 (English, social studies) or in K-12 (art & foreign language).

**C. University Assessment Funds**

**Were university assessment funds used by the department/program for assessment activities?** Yes No

*If university assessment funds were used by the department or program, describe how university assessment funds were used and the contribution the funds had on the assessment process. Funding requests for the next academic year have a separate process and should not be included here.*

The STLES school used the university funds to pay portfolio readers to score the secondary program students' portfolios and to pay the partial salary of a graduate student to help manage the data.

**D. Student Learning Outcomes** On the pages that follow, list the Student Learning Outcomes associated with the program identified in this assessment form.

**D1) Student Learning Outcome #1:** Student demonstrates Content Knowledge: Portfolio II: INTASC Standard 4, LEADS 3.1

**Identify opportunities for students to learn this outcome during the 2016-2017 academic year:**

*For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.*

Secondary teacher candidates learn and practice Learning Outcome #1 during their final two years in the professional education program. Teacher candidates demonstrate their academic content knowledge during portfolio submission II as they submit artifacts accompanied by descriptive narratives that demonstrate their understanding of the central concepts and methods of inquiry of the content discipline they teach. Secondary teacher candidates demonstrate their ability to create learning experiences that make these aspects of the content discipline meaningful for secondary students. Learner Outcome #1 is often met through the submission of inquiry-based lesson plans, educational research papers, or other relevant assignments.

**How many students were included in the assessment of this outcome?**

71 secondary students

**How were students selected to participate in the assessment of this outcome?**

The Learning Outcome is part of the Portfolio II submission during the semester prior to internship.

**Assessment Methods**

*Identify the method(s) used to assess this learning outcome. Check all that apply.*

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Survey   | <input type="checkbox"/> Satisfaction Survey   | <input checked="" type="checkbox"/> Internship                    |
| <input checked="" type="checkbox"/> Rating of skills (e.g., rubrics)                      | <input type="checkbox"/> Benchmarking  | <input type="checkbox"/> Interviews                               |
| <input checked="" type="checkbox"/> Analysis of written artifacts                         | <input checked="" type="checkbox"/> Measuring effectiveness relative to professional standards | <input type="checkbox"/> Performance or jury                      |
| <input checked="" type="checkbox"/> Comprehensive, certification, or professional exam(s) | <input type="checkbox"/> Review of thesis/dissertation/ creative component                     | <input type="checkbox"/> Visual collection (photos, videos, etc.) |
| <input type="checkbox"/> Oral presentation  | <input checked="" type="checkbox"/> Capstone project   | <input type="checkbox"/> Review of student research               |
| <input checked="" type="checkbox"/> Course project  |  | <input type="checkbox"/> Other (please specify):                  |
|   |  | <a href="#">Click here to specify.</a>                            |

**Describe how the assessment method was implemented, administered, and/or conducted.**

Each Secondary Student Candidate is required to submit a Professional Education Portfolio, which includes three individual submissions used to assess his/her level of learning related to each learning outcome. The submissions occur during different semesters of their professional education program, the final submission is during the candidates' student teaching semester. The required artifacts of the portfolios are created as assignments in classes, field experiences and internships. Additionally, students complete reflective writings about the Core Concepts of the Professional Education Unit (LEADS) and their accomplishments in their fields of teaching. The portfolios are evaluated/scored by external reviewers who are certified classroom teachers, randomly selected from a pool of highly recommended public/private schools. Most are nationally board certified teachers (all are state certified teachers) who are trained and experienced in evaluating portfolios. The reviewers are paid by stipends and they evaluate multiple portfolios.

Students' portfolios ratings represent their final scores on the assessed artifacts for the learning outcomes. Each artifact is assessed with a rating rubric ranging from 3 (high) to 0 (unacceptable).

**Did your department/program faculty have a goal set for this learning outcome?**

Yes

No

For example, "80% of students included in the assessment will receive a 4 on the rubric" or "80% of students included in the assessment will achieve a passing score on the certification exam." If yes, please describe the goal below.

Students will receive scores of 0, 1, 2 or 3 on each assessment standard of the portfolio. If a student receives a score of 1 on any standard, they are given a Plan of Improvement and specific instructions/suggestions from the reviewers to correct/revise the narrative. The revision must be completed and resubmitted within 2 weeks. Students must receive 2's or 3's on the score in order to pass the portfolio. The expectation of secondary faculty is that all students will persevere with the revisions and pass the portfolio, if they do not, they are dropped from the program.

**Provide a summary of the results from the assessment of Learning Outcome 1.**

Report student's scores for this assessment, as well as students' strengths and weaknesses relative to this learning outcome.

The Secondary Program currently has 6 content areas represented. Listed below are the scores for Portfolio II: INTASC Standard 4, LEADS 3.1 in each content area\* (an explanation will be found later in this report. Math and Science will be listed separately for this Assessment Report.

- Social Studies (N=24) 2.33; English (N=26) 2.62; Foreign Language (N=3) 2.33; Art (N=3) 2.67---the Average score was 2.48.
- Math (N=7) 2.00; Science (N= 2.75)--Average score was 2.40

**What do the results suggest about student achievement of this learning outcome?**

All content areas had scores 2.0 or above, however improvement is always desired and worked for.

**Timeline for the Assessment**

Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.

Each Semester

Yearly

Every other year

Other (please specify): If the assessment of Learning Outcome 1 occurs on a cycle or rotation, click here to describe and provide the rationale.

**D2) Student Learning Outcome #2:** Student demonstrates effective instructional skills to meet the needs of diverse learners and demonstrates effective management of instructional environments. Portfolio II: INTASC Standards 1/2/7; LEADS 3.3/4

**Identify opportunities for students to learn this outcome during the 2016-2017 academic year:**

For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.

Secondary teacher candidates learn and practice Learning Outcome #2 during their final two years in the Professional Education Program. They demonstrate their effective instructional skills and effective management skills in their instructional environments during Portfolio submission II. Students may use the following artifacts to demonstrate Learning Outcome 1) Lesson plans that incorporate activities that meet several learning styles or learning abilities; 2) Lesson plans that use the classroom or environment as a teaching tool; 3) Lesson plans that have a variety of activities for students of differing abilities; 4) A case study of a particular student; 5) A description of tutoring sessions; 6) A description of IEP meetings; 7) Descriptions of varying assessments for different learners; 8) A major paper from a Pedagogy Class; 9) Evidence of Professional Development.

**How many students were included in the assessment of this outcome?**

71 Secondary Students

**How were students selected to participate in the assessment of this outcome?**

The Learning Outcome is part of the Portfolio II submission during the semester prior to student internship

**Assessment Methods**

Identify the method(s) used to assess this learning outcome. Check all that apply.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Survey   | <input type="checkbox"/> Satisfaction Survey   | <input checked="" type="checkbox"/> Internship                    |
| <input type="checkbox"/> Rating of skills (e.g., rubrics)                                 | <input type="checkbox"/> Benchmarking  | <input checked="" type="checkbox"/> Interviews                    |
| <input checked="" type="checkbox"/> Analysis of written artifacts                         | <input checked="" type="checkbox"/> Measuring effectiveness relative to professional standards | <input type="checkbox"/> Performance or jury                      |
| <input checked="" type="checkbox"/> Comprehensive, certification, or professional exam(s) | <input type="checkbox"/> Review of thesis/dissertation/ creative component                     | <input type="checkbox"/> Visual collection (photos, videos, etc.) |
| <input checked="" type="checkbox"/> Oral presentation                                     | <input checked="" type="checkbox"/> Capstone project   | <input type="checkbox"/> Review of student research               |
| <input checked="" type="checkbox"/> Course project  |  | <input type="checkbox"/> Other (please specify):                  |
- [Click here to specify.](#)

**Describe the how the assessment method was implemented, administered, and/or conducted.**

This assessment has the same explanation as D1 above.

**Did your department/program faculty have a goal set for this learning outcome?**  Yes  No

*For example, "80% of students included in the assessment will receive a 4 on the rubric" or "80% of students included in the assessment will achieve a passing score on the certification exam." If yes, please describe the goal below.*

This assessment has the same explanation as D1 above.

**Provide a summary of the results from the assessment of Learning Outcome 2.**

*Report student's scores for this assessment, as well as students' strengths and weaknesses relative to this learning outcome.*

*Standard 1:*

**Learner Development:** Social Studies (N=24) 2.25; English (N=26) 2.58; Foreign Language (N=3) 3.00; Art (N=3) 2.67; Avg = 2.46  
Math (N=7) 2.00; Science (N=8) 2.50; Avg=2.27

*Standard 2*

**Learning Differences:** Social Studies (N=24) 2.29; English (N=26) 2.65; Foreign Language (N=3) 2.67; Art (N=3) 2.67; Avg=2.50  
Math (N=7) 2.00; Science (N=8) 2.38; Avg-2.20

**What do the results suggest about student achievement of this learning outcome?**

All content areas had scores 2.0 or above but improvement is always desired and worked for.

**Timeline for the Assessment**

*Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.*

Each Semester  Yearly  Every other year

Other (please specify): If the assessment of Learning Outcome 2 occurs on a cycle or rotation, click here to describe and provide the rationale.

**D3) Student Learning Outcome #3:** Students use Best Practices related to motivation and behavior to create learning environments that encourage positive social interaction, self-motivation and active engagement in learning, thus, providing opportunities for success---Portfolio II: INTASC Standards 2 & 3; LEADS 3.4/4

**Identify opportunities for students to learn this outcome during the 2016-2017 academic year:**

For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.

Student interns learn and practice Learning Outcome #3 during the last two years in the professional education program. Interns demonstrate their ability to create learning environments that encourage positive social interactions, self-motivation, and active engagement during portfolio submission II. To achieve this task, interns submit artifacts accompanied by narratives that demonstrate their understanding of creating successful learning environments. Learning Outcome #3 is often met through the submission of lesson plans that incorporate group work, tutoring sessions, IEP meetings, field trips, group projects, service learning projects and interpersonal activities where students of varying abilities help each other and journal about it.

**How many students were included in the assessment of this outcome?**

71 Secondary Students

**How were students selected to participate in the assessment of this outcome?**

The Learning Outcome is part of the Portfolio II submission during the semester prior to student internship

**Assessment Methods**

Identify the method(s) used to assess this learning outcome. Check all that apply.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Survey   | <input type="checkbox"/> Satisfaction Survey  | <input checked="" type="checkbox"/> Internship   |
| <input type="checkbox"/> Rating of skills (e.g., rubrics)                                 | <input type="checkbox"/> Benchmarking   | <input checked="" type="checkbox"/> Interviews   |
| <input checked="" type="checkbox"/> Analysis of written artifacts                         | <input type="checkbox"/> Measuring effectiveness relative to professional standards | <input type="checkbox"/> Performance or jury   |
| <input checked="" type="checkbox"/> Comprehensive, certification, or professional exam(s) | <input type="checkbox"/> Review of thesis/dissertation/ creative component          | <input type="checkbox"/> Visual collection (photos, videos, etc.)                          |
| <input type="checkbox"/> Oral presentation  | <input checked="" type="checkbox"/> Capstone project                                | <input checked="" type="checkbox"/> Review of student research                             |
| <input checked="" type="checkbox"/> Course project  |   | <input type="checkbox"/> Other (please specify):<br><a href="#">Click here to specify.</a> |

**Describe the how the assessment method was implemented, administered, and/or conducted.**

This assessment has the same explanation as D1 above.

**Did your department/program faculty have a goal set for this learning outcome?**  Yes  No

For example, "80% of students included in the assessment will receive a 4 on the rubric" or "80% of students included in the assessment will achieve a passing score on the certification exam." If yes, please describe the goal below.

This assessment has the same explanation as D1 above.

**Provide a summary of the results from the assessment of Learning Outcome 3.**

Report student's scores for this assessment, as well as students' strengths and weaknesses relative to this learning outcome.

Secondary has 6 content areas represented.

Social Studies (N=24) 2.25; English (N=26) 2.58; Foreign Language (N=3) 2.67; Art (N=3) 2.67; Avg = 2.45  
Math (N=7) 2.00; Science (N=8) 2.38; Avg=2.20

**What do the results suggest about student achievement of this learning outcome?**

All content areas had scores 2.0 or above but improvement is always desired and worked for.

### Timeline for the Assessment

Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.

Each Semester

Yearly

Every other year

Other (please specify): If the assessment of Learning Outcome 3 occurs on a cycle or rotation, click here to describe and provide the rationale.

**D4) Student Learning Outcome #4 [IF NEEDED]:** Student Interns foster positive interaction with school colleagues, parents/families, and organizations in the community to actively engage them in support of candidates' learning and well-being; interns seek appropriate leadership roles and opportunities to take responsibility. Portfolio II; INTASC Standard 10; LEADS 1

### Identify opportunities for students to learn this outcome during the 2016-2017 academic year:

For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.

Student Interns learn and practice Learning Outcome #4 during the final two years in the professional education program. Interns demonstrate their ability to foster positive interactions with school colleagues, parent/families, and organizations in the community during Portfolio II. To achieve this task, interns submit descriptive narratives that demonstrate their understanding. Learning Outcome #4 is often met through the submission of descriptive narrative of: staff meetings, departmental meetings, IEP meetings, parent/teacher conferences, after-school functions, school board meetings, school fundraisers, professional development on community outreach, communication with parents (letters, emails, etc) and logs of communications.

### How many students were included in the assessment of this outcome?

71 secondary students

### How were students selected to participate in the assessment of this outcome?

The Learning Outcome is part of the Portfolio II submission during the semester prior to student internship

### Assessment Methods

Identify the method(s) used to assess this learning outcome. Check all that apply.

Survey

Satisfaction Survey

Internship

Rating of skills (e.g., rubrics)

Benchmarking

Interviews

Analysis of written artifacts

Measuring effectiveness relative to professional standards

Performance or jury

Comprehensive, certification, or professional exam(s)

Review of thesis/dissertation/ creative component

Visual collection (photos, videos, etc.)

Oral presentation

Review of student research

Course project

Capstone project

Other (please specify):

**Describe the how the assessment method was implemented, administered, and/or conducted.**

This assessment has the same explanation as D1 above.

**Did your department/program faculty have a goal set for this learning outcome?**       Yes       No

*For example, "80% of students included in the assessment will receive a 4 on the rubric" or "80% of students included in the assessment will achieve a passing score on the certification exam." If yes, please describe the goal below.*

This assessment has the same explanation as D1 above.

**Provide a summary of the results from the assessment of Learning Outcome 4.**

*Report student's scores for this assessment, as well as students' strengths and weaknesses relative to this learning outcome.*

Secondary has 6 content areas represented. Listed are the scores for Portfolio II: Standard 10; INTASC 10; LEADS 1

Social Studies (N=24) 2.25; English (N=26) 2.38; Foreign Language (N=3) 2.67; Art (N=3) 2.36; Avg: 2.36  
Math (N=7) 2.00; Science (N=8) 2.75; Avg. 2.40

**What do the results suggest about student achievement of this learning outcome?**

All content areas had scores 2.0 or above but improvement is always desired and worked for.

**Timeline for the Assessment**

*Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.*

Each Semester       Yearly       Every other year

Other (please specify): If the assessment of Learning Outcome 4 occurs on a cycle or rotation, click here to describe and provide the rationale.

**E. Summary of Assessment Results**

**Describe the overall results of the program assessment and program faculty members' interpretation of the assessment results.**

*What did the assessment reveal? What do faculty interpret the results to mean? What do the results suggest about the curriculum, teaching practices, and/or student achievement of the program learning outcomes?*

The **overall scoring results** of the Learner Outcomes in each of the six content areas described in the preceding pages are listed here:

Social Studies (N=24) overall average score is 2.28  
English (N=26) overall average score is 2.56  
Foreign Language (N= 3) overall average score is 2.67  
Art (N=3) overall average score is 2.67  
Math (N=7) overall average score is 2.00  
Science (N=8) overall average score is 2.58

After analyzing all the content area scores, the Secondary faculty reviews our teaching approaches, expectations, and requirements in all of our classes to work for improving students' understanding what they need to accomplish in their assignments. The Oklahoma State Department of Education recently updated the competencies for Educator Preparation, replacing the previous Oklahoma General Competencies with the new INTASC standards. Consequently, the OSU Professional Education Unit updated the portfolio template and rubric to high-light the new INTASC standards and correlate them with the OSU Core Values (LEADS) directly. The faculty also re-configured the timing of the three Portfolio submissions. Submission II now has the bulk of the Learner Outcomes, with this submission being required in the semester **prior** to internship in the CIED 4724 course. This class also has a

42 hour field experience attached for the students to have two consecutive semesters of field placement and experience in the same school location. Submission III is submitted during the final semester of Internship and has fewer requirements, so the students can more fully focus on their internship. Submission III requirements are: 1) updated credential documents; 2) a second "Philosophy Statement"; and 3) statements of the "Impact on P-12 Learners", which are taken from the students' Capstone Project the Teacher Work Sample (TWS).

## **F. Dissemination of Results**

**Describe the individual(s) or committee (e.g., a curriculum committee) responsible for reviewing and interpreting assessment data.**

Following the compilation of data by the Professional Education Unit (PEU), this information is given to the program coordinator and the secondary education content faculty. Each content faculty (Art, English, Foreign Language, Social Studies, Math and Science) studies the data information to determine how the secondary faculty should proceed with the assignments required for the final semesters' classes, which are common to all the secondary/P-12 students. **\*Spring of 2017 was the last time that Math and Science were part of the Secondary Education Program because of their move to the self-contained OSU-TEACH program where all the math and science students will be grouped. That means, beginning fall 2017 the Secondary Program will have only the content areas of Art, Foreign Language, English and Social Studies. \***

**Describe the process for sharing and discussing assessment results with program faculty.**

The Secondary Program faculty decided to maintain all the current assignments for assessment that we established a semester ago. We are confident these assignments prepare the students for their internships and allow our students to be successful in their placements. We constantly work to monitor their assignments for rigor, validity and authenticity.

## **G. Program Improvements Based on Assessment**

**Based on the findings of this assessment, what changes are being considered or planned for the program?**  
*Describe the actions that will be taken as a result of the discussion of the assessment evidence.*

The Secondary Education Program has had several changes since 2014, including the content areas of science and math being gradually phased out of secondary and into its self-contained OSU Teach Program. It is prudent and wise to now work toward consistency in the four remaining content areas (Art, Foreign Language, English and Social Studies). Since the Oklahoma State Department of Education removed the state competencies, which were replaced with the now required use of INTASC Standards, along with the OSU LEADS Core Values, the Secondary Education Faculty has decided to remain consistent and keep our course assignments, projects, and papers that contribute to our students' knowledge-base. However, for the next assessment period 2017-2018, the secondary faculty agreed to add the OPTE Certification Exam as an additional tool for assessment.

**Based on the findings of this assessment, what (if any) changes are planned for the assessment process?**  
*For example, are there additional assessment data that may need to be collected? Are changes to the program assessment plan warranted?*

The Secondary Program Faculty (Art, Foreign Language, English, Social Studies) has agreed to begin using the OPTE Certification Exam as an additional assessment tool. During Fall 2017 the faculty will meet to cross-walk our course assignments with the OPTE exam contents to be certain that our common courses and all assignments will parallel the particular knowledge base found in the OPTE exam. The results will be recorded in 2017-2018 Assessment Report.

**Describe the process for implementing these changes/planned program improvements.**

See the explanation above.

## H. Assessment Tools

Please provide a copy of any assessment tools (questionnaire, scale, interview questions, etc.) [here](#).

Portfolio Scores and OPTE 6-12 Certification Examination Scores:

Table 1. Portfolio Submission Mean Scores by Content Area

COMPETENCY	SOCIAL STUDIES (N=24)	ENGLISH (N=26)	FOREIGN LANGUAGE (N=3)	ART (N=3)	AVERAGE SCORE (N=56)
Content Knowledge	2.33	2.62	2.33	2.67	2.48
Learner Development	2.25	2.58	3.00	2.67	2.46
Learning Differences	2.29	2.65	2.67	2.67	2.50
Learning Environments	2.25	2.58	2.67	2.67	2.45
Leadership and Collaboration	2.25	2.38	2.67	2.67	2.36
Average Score	2.28	2.56	2.67	2.67	2.45

Table 2: Portfolio Submission Mean Scores by Content Area

COMPETENCY	MATH (N=7)	SCIENCE (N=8)	AVERAGE SCORE (N=15)
Content Knowledge	2.00	2.75	2.40
Learner Development	2.00	2.50	2.27
Learning Differences	2.00	2.38	2.20
Learning Environments	2.00	2.38	2.20
Leadership and Collaboration	2.00	2.75	2.40
Average Score	2.00	2.58	

Table 3. 2016 – 2017 OPTE 6-12 Certification Examination Score Means For Art, Foreign Language, English, and Social Studies

Element	Fall (N=12)	Spring (N=31)
<b>Total Score</b>	259.00	258.42
<b>Subarea 1</b>	264.67	271.55
<b>Subarea 2</b>	265.58	263.35
<b>Subarea 3</b>	270.83	271.37
<b>Subarea 4</b>	256.67	245.19
<b>Subarea 5</b>	237.67	230.97
<b>Subarea 6</b>	233.33	230.97

Table 4.

2016 – 2017 OPTE 6-12 Mathematics & Science Candidates Certification Examination Score Means

Element	Fall (N=7)	Spring (N=12)
<b>Total Score</b>	263.00	264.33
<b>Subarea 1</b>	272.86	273.75
<b>Subarea 2</b>	272.57	270.25
<b>Subarea 3</b>	265.57	281.92
<b>Subarea 4</b>	249.29	244.00
<b>Subarea 5</b>	239.29	232.50
<b>Subarea 6</b>	242.86	241.67