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# INSTITUTE OF TECHNOLOGY

## OKLAHOMA STATE UNIVERSITY INSTITUTE OF TECHNOLOGY-OKMULGEE ANNUAL STUDENT ASSESSMENT REPORT OF 2020-21 ACTIVITY

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Oklahoma State University Institute of Technology-Okmulgee

**OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION**  
**Annual Student Assessment Report of 2020-21 Activity**

**Section I – Entry Level Assessment and Course Placement**

**Activities**

- I-1. *What information was used to determine college-level course placement? Please report the specific multiple measures your institution used for FY 2020-2021 (e.g., high school GPA and CPT cut scores).***

Oklahoma State University Institute of Technology (OSUIT) used the ACT® and SAT® exams as preliminary measures to evaluate first-time freshmen. OSUIT utilizes multiple placement measures – to include the student’s unweighted high school grade point average (GPA), Next-Generation ACCUPLACER® scores, ACCUPLACER® scores, and WritePlacer® scores. Students who failed to demonstrate academic proficiency in a given subject area through one of these placement methods were required to complete remediation prior to or as a corequisite to enrollment in college-level coursework in the respective subject area.

- I-2. *How were students determined to need remediation of deficiencies (e.g., CPT cut scores or advising process)?***

OSUIT utilized multiple placement measures to determine a student’s academic proficiency in reading, writing, and mathematics. This academic proficiency could be demonstrated in one of the following six ways:

1. Transferring in college credits that demonstrate academic proficiency in a subject area.
2. Submitting ACT® subject scores of 19 or above in subject area(s).
3. Submitting SAT® test scores that demonstrate academic proficiency based upon the following subject scores.

Evidence-Based Reading and Writing	510
Math	510

4. Submitting a valid high school transcript reflecting an unweighted cumulative GPA of 2.50 or higher.
5. Submitting Next-Generation ACCUPLACER® scores at or above the minimum required score on each component as listed below.

Exam	College-Level Placement Score	Subject(s)
Reading	250	All
Writing <i>or</i> WritePlacer®	250 <i>or</i> 5	Freshman Composition and Technical Writing
Arithmetic	250	Math for Critical Thinking and Business Mathematics
Quantitative Reasoning, Algebra and Statistics (QAS)	250	College Algebra
Reading <i>and</i> Quantitative Reasoning, Algebra and Statistics (QAS)	250	Science

6. Submitting ACCUPLACER<sup>®</sup> scores at or above the minimum required score on each component as listed below.

Exam	College-Level Placement Score	Subject(s)
Reading Comprehension	75	All
Writing Skills	80 or 70-79 plus WritePlacer <sup>®</sup> score of 5 or above	Freshman Composition and Technical Writing
Arithmetic	70	Math for Critical Thinking and Business Mathematics
Elementary Algebra	74	College Algebra
Reading Comprehension <i>and</i> Elementary Algebra	75 <i>and</i> 74	Science

Prior to enrollment, students were required to meet with an academic advisor. During this advisement session, factors such as placement assessment scores, high school GPA, intervening time span since the student's last mathematics and/or writing classes, and student's comfort level with applicable course requirements were evaluated to determine the most advantageous plan of study for the student.

Based upon these factors, students were placed and/or opted-in to one of the following options:

- direct placement into the appropriate course, or
- enrollment into appropriate course plus corequisite strategies support course.

The Next-Generation ACCUPLACER<sup>®</sup> exam was administered online through the OSUIT's Assessment Center and at remote sites approved by the university. This allowed students access to testing with flexible hours and at numerous sites, including sites for students living abroad. OSUIT also provided students with additional flexibility in course placement processes by continuing to accept ACCUPLACER<sup>®</sup> and ACT COMPASS<sup>®</sup> scores for up to three years after the exam was administered.

**I-3. *What options were available for identified students to complete developmental education within the first year or 24 college-level credit hours?***

If students were unable to meet the minimum requirements established to indicate academic proficiency, they were enrolled into an appropriate course plus corequisite strategies support course as a remediation pathway.

Except for students enrolled in corequisite developmental coursework, students could enroll in collegiate level courses within the deficiency's discipline area only after the deficiency was satisfied. One-on-one mentoring, tutoring, and academic counseling were available to academically at-risk students while enrolled in developmental courses.

**I-4. *What information was used to determine co-requisite course placement? Please report the specific multiple measures your institution used for FY 2020-2021 (e.g., high school GPA and CPT cut scores).***

OSUIT has suspended the use of traditional 0-level developmental course sequences for academic remediation. As stated above, if students were unable to meet the minimum requirements established to indicate academic proficiency, they were enrolled into an appropriate course plus corequisite strategies support course as a remediation pathway. Students who met the minimum requirements established to indicate academic proficiency also had the option to opt in to corequisite strategies courses if they chose to do so.

**I-5. *Describe the method used to place “adult” students who do not have ACT/SAT scores.***

Prior to enrollment, adult students are required to meet with an academic advisor, and those with fewer than 24 credit hours were sent to the Assessment Center for Next-Generation ACCUPLACER® testing. After testing they then meet with an academic advisor for an advisement session. During this advisement session, factors such as placement assessment scores, high school GPA, intervening time span since the student’s last mathematics and/or writing classes, and student’s comfort level with applicable course requirements were evaluated to determine the most advantageous plan of study for the student. Based upon these factors, a student was either placed or opted-in to one of the following options:

- direct placement into the appropriate course, or
- enrollment into appropriate course plus corequisite strategies support course.

The Next-Generation ACCUPLACER® exam is administered online through the OSUIT’s Assessment Center and at remote sites approved by the university. This allows students access to testing with flexible hours and at numerous sites, including sites for students living abroad. OSUIT also provided students with additional flexibility in course placement processes by continuing to accept ACCUPLACER® and ACT COMPASS® scores for up to three years after the exam was administered.

**I-6. *Describe analyses and findings of student success in both developmental and college-level courses, effectiveness of the placement decisions, evaluation of cut-scores, and changes in the entry-level assessment process or approaches to teaching as a result of findings.***

Student success at OSUIT is defined as passing a class with an A, B, C, D or P letter grade.

### Student Success, Developmental Coursework

COURSE	Title	Trimester	AW	GRADE		W	Total Students	# Passed	% Passed
				NP	P				
ENGL 0102*	Technical Writing Strategies	Summer 2020							
		Fall 2020		2	3		5	3	60.00%
		Spring 2021		1	3		4	3	75.00%
		<b>ENGL 0102 Subtotal</b>		<b>3</b>	<b>6</b>		<b>9</b>	<b>6</b>	<b>66.67%</b>
ENGL 0112*	Freshman Composition Strategies	Summer 2020	3	3	5		11	5	45.45%
		Fall 2020	3	6	20		29	20	68.97%
		Spring 2021	1		4		5	4	80.00%
		<b>ENGL 0112 Subtotal</b>	<b>7</b>	<b>9</b>	<b>29</b>		<b>45</b>	<b>29</b>	<b>64.44%</b>
MATH 0142*	Math for Critical Thinking Strategies	Summer 2020			3	1	4	3	75.00%
		Fall 2020	5	4	14	1	24	14	58.33%
		Spring 2021		3	2	1	6	2	33.33%
		<b>MATH 0143 Subtotal</b>	<b>5</b>	<b>7</b>	<b>19</b>	<b>3</b>	<b>34</b>	<b>19</b>	<b>55.88%</b>
MATH 0152*	College Algebra Strategies	Summer 2020		1	1	1	3	1	33.33%
		Fall 2020		5	9	2	16	9	56.25%
		Spring 2021		2	5	3	10	5	50.00%
		<b>MATH 0152 Subtotal</b>		<b>8</b>	<b>15</b>	<b>6</b>	<b>29</b>	<b>15</b>	<b>51.72%</b>
MATH 0202*	Business Mathematics Strategies	Summer 2020			1		1	1	100.00%
		Fall 2020							
		Spring 2021							
		<b>MATH 0202 Subtotal</b>			<b>1</b>		<b>1</b>	<b>1</b>	<b>100.00%</b>
<b>Grand Total</b>		<b>12</b>	<b>27</b>	<b>70</b>	<b>9</b>	<b>118</b>	<b>70</b>	<b>59.32%</b>	

\*Corequisite support courses

## Student Success, College-Level Coursework

Course	Title	Trimester	GRADE									Total Students	# Pass	% Pass	
			A	AW	B	C	D	F	I	NP	P				W
BIOL 1014	General Biology (Non-Majors)	Summer 2020	11		12	5	1	2					31	29	93.55%
		Fall 2020	9		9	11	4	2				3	38	33	86.84%
		Spring 2021	6		13	3	1	2				1	26	23	88.46%
	BIOL 1014 Subtotal			26	0	34	19	6	6	0	0	0	4	95	85
BIOL 1114	General Biology	Summer 2020	6		7	7	1	2				1	24	21	87.50%
		Fall 2020	38		45	16	2	15				2	118	101	85.59%
		Spring 2021	17		27	8	2	6				2	62	54	87.10%
	BIOL 1114 Subtotal			61	0	79	31	5	23	0	0	0	5	204	176
<b>BIOL Total</b>			<b>87</b>	<b>0</b>	<b>113</b>	<b>50</b>	<b>11</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>299</b>	<b>261</b>	<b>87.29%</b>
ENGL 1033	Technical Writing I	Summer 2020	8		10	6	2	9				1	36	26	72.22%
		Fall 2020	22		33	22	5	31				3	116	82	70.69%
		Spring 2021	20	5	39	19	15	15				4	117	93	79.49%
	ENGL 1033 Subtotal			50	5	82	47	22	55	0	0	0	8	269	201
ENGL 1113	Freshman Composition I	Summer 2020	36	3	15	9	7	5				5	80	67	83.75%
		Fall 2020	114	6	63	33	24	23				7	270	234	86.67%
		Spring 2021	60	5	37	20	8	9				5	144	125	86.81%
	ENGL 1113 Subtotal			210	14	115	62	39	37	0	0	0	17	494	426
ENGL 1213	Freshman Composition II	Summer 2020	39		31	18	11	11				6	116	99	85.34%
		Fall 2020	38		34	28	8	14				8	130	108	83.08%
		Spring 2021	81	1	64	36	11	22				16	231	192	83.12%
	ENGL 1213 Subtotal			158	1	129	82	30	47	0	0	0	30	477	399
ENGL 2033	Technical Writing II	Summer 2020	22		30	26	7	9					94	85	90.43%
		Fall 2020	17		11	3	4	4					39	35	89.74%
		Spring 2021	19		21	17	3	8				2	70	60	85.71%
	ENGL 2033 Subtotal			58	0	62	46	14	21	0	0	0	2	203	180
<b>ENGL Total</b>			<b>476</b>	<b>20</b>	<b>388</b>	<b>237</b>	<b>105</b>	<b>160</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>1443</b>	<b>1206</b>	<b>83.58%</b>
HIST 1483	US History to 1865	Summer 2020	19		4	1		1					25	24	96.00%
		Fall 2020	28		11	2	1	5				1	48	42	87.50%
		Spring 2021	22		11	5	2	9				1	50	40	80.00%
	HIST 1483 Subtotal			69	0	26	8	3	15	0	0	0	2	123	106
HIST 1493	US History since 1865	Summer 2020	80		31	22	3	15				2	153	136	88.89%
		Fall 2020	141		74	35	10	24				4	288	260	90.28%
		Spring 2021	79		43	25	5	21				5	178	152	85.39%
	HIST 1493 Subtotal			300	0	148	82	18	60	0	0	0	11	619	548
<b>HIST Total</b>			<b>369</b>	<b>0</b>	<b>174</b>	<b>90</b>	<b>21</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>742</b>	<b>654</b>	<b>88.14%</b>
MATH 1493	Math for Critical Thinking	Summer 2020	7					1				1	9	7	77.78%
		Fall 2020	15	6	12	6	5	16				4	64	38	59.38%
		Spring 2021	7		3	4	3	8				3	28	17	60.71%
	MATH 1493 Subtotal			29	6	15	10	8	25	0	0	0	8	101	62
MATH 1513	College Algebra	Summer 2020	3		18	12	5	10				12	60	38	63.33%
		Fall 2020	68		67	47	14	53				34	283	196	69.26%
		Spring 2021	33		26	21	9	21				12	122	89	72.95%
	MATH 1513 Subtotal			104		111	80	28	84	0	0	0	58	465	323
MATH 2003	Business Mathematics	Summer 2020	23		24	16	12	14				1	90	75	83.33%
		Fall 2020	29		21	13	6	15				5	89	69	77.53%
		Spring 2021	26		16	23	5	15				1	86	70	81.40%
	MATH 2003 Subtotal			78	0	61	52	23	44	0	0	0	7	265	214
<b>MATH Total</b>			<b>211</b>	<b>6</b>	<b>187</b>	<b>142</b>	<b>59</b>	<b>153</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>831</b>	<b>599</b>	<b>72.08%</b>
<b>Grand Total</b>			<b>1143</b>	<b>26</b>	<b>862</b>	<b>519</b>	<b>196</b>	<b>417</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>152</b>	<b>3315</b>	<b>2720</b>	<b>82.05%</b>

## Section II – General Education Assessment

### Administering Assessment

#### II-1. *Describe the institutional general education competencies/outcomes and how they are assessed.*

Assessment of general education outcomes was conducted as described in each program's academic assessment plan; these assessments were developed by faculty specifically for each program outcome. Six Core Outcomes common to all programs of study grew from this process. Student attainment of general education outcomes was measured as described below in alignment with these Core Outcomes, which were also addressed summatively within each technical program's assessment plans. Updates were made to the outcomes in 2019-2020 by the institutional Assessment Committee. These updates were made to broaden the scope of the outcomes to be more encompassing of the values of OSUIT.

- **Core Outcome 1 – Communication:** Effectively communicate electronically, verbally and in writing. [No changes were made to this outcome.] *Communication* was assessed in ENGL 1033 Technical Writing I, ENGL 1113 Freshman Composition I, ENGL 1213 Freshman Composition II, ENGL 2033 Technical Writing II, ENGL 3323 Technical Writing III, SPCH 1113 Introduction to Speech Communications, and SPCH 2313 Small Group Communications.
- **Core Outcome 2 – Critical Thinking:** Demonstrate logical, systematic problem-solving techniques. [This outcome was changed to “Critical Thinking: Demonstrate logical, systematic critical thinking.”] *Critical Thinking* was assessed in BIOL 1114 General Biology and in specific mathematics courses as determined by the student's program of study.
- **Core Outcome 3 – Ethics and Diversity:** Develop and display a sense of personal, social, and professional ethics, as well as an appreciation of and encouragement for diversity. [This outcome was split into two outcomes: “Core Outcome 3 – Ethics: Demonstrate ethical behavior and decision-making,” and “Core Outcome 4 – Diversity & Inclusion: Practice inclusivity by supporting individual and cultural diversity.”] *Ethics* and *Diversity & Inclusion* were assessed in PHIL 1213 Ethics.
- **Core Outcome 4 – History and Government:** Explain the cultural heritage and primary elements of the history and government of the U.S. and its people, including diversity, especially as it impacts one's industry or field of study. [This outcome was changed to “Core Outcome 5 – Civic Responsibility: Contribute positively to community, society, and government.”] *Civic Responsibility* was assessed in HIST 1483 U.S. History to 1865, HIST 1493 U.S. History since 1865, and POLS 1113 U.S. Government.
- **Core Outcome 5 – Technology:** Access and use technology appropriate to one's industry or field of study. [This outcome was changed to “Core Outcome 6 – Technology: Utilize technology to aid in the discovery, development, and purposeful application of knowledge and skills]. *Technology* was assessed in CS 1013 Computer Literacy & Applications and ENGL 1213 Freshman Composition II.
- **Core Outcome 6 – Service Learning:** Effectively utilize learned technologies and processes to aid various constituencies in the community. [This outcome was integrated into Civic Responsibility.]

Faculty set a uniform college benchmark for assessment of student learning: At least eighty percent (80%) of students will complete each assessment at a seventy percent (70%) level of competency or higher (some programs, such as Instrumentation Technology Engineering and Nursing, require more rigorous levels of competency in alignment with specialized accreditation or industry certification requirements). OSUIT assessed general education measures for associate degree programs prior to the end of the degree program and for baccalaureate degree programs prior to the completion of seventy credit hours of instruction and at the end of the degree program. Measures included those chosen by faculty to improve teaching and learning in areas such as communication, critical thinking, mathematics, reading, and writing. These assessment methods have been standardized to ensure that the same assessment instrument was utilized consistently in each course section, regardless of faculty teaching the course.

**II-2. *Describe how the assessments were administered and how students were selected.***

Formative mid-level assessments of general education outcomes were faculty-developed, faculty-driven, and primarily course-embedded to motivate students to participate to their fullest abilities. Because it is possible in some cases for a student to pass a particular class while not passing the assessment, or to pass the assessment while not passing the class, faculty entered the results of these assessments into the Banner Student Information System at the same time as they reported student course grades. Results were tabulated based upon faculty reported results in the database and flagged as a numerical score representing “Pass,” “Fail,” or no score for “Non-Applicable.” In addition, individual passing and failing scores were collected in order to utilize the information in revision of assessment processes.

**II-3. *Describe strategies used to motivate students to substantively participate in the assessment.***

The courses selected for inclusion in the assessment process were core requirements for each program area, thereby providing an opportunity for all students to participate in the assessment process. Assessments were developed as core elements within courses and each assessment was integrated into the course structure. Assessment instruments were tied to required course components and curriculum requirements to motivate students to participate to their fullest abilities.

**II-4. *What instructional changes occurred or are planned in response to general education assessment results?***

A review of institutional assessment data took place during the summer trimester. Changes were made to assessment plans for the next academic year based on assessment data, faculty observations, program advisory committee recommendations, classroom experiences, and changes within industry. During 2020-2021, DFWI course grades were reviewed in addition to assessment scores and questions regarding the validity and reliability of current general education assessment data emerged. Problems were identified specific to the utilization of Banner to report assessment results. These problems included the time restrictions of Banner, overgeneralized cell names, the collection and use of a holistic score based on one moment in time, the entering of zeros in absence of a score, and the cumbersome process of data retrieval and reporting.

The time restrictions of having to enter the assessment data only during the grade entry period presented challenges for some faculty as did the overgeneralized labels for the



assessment cells. For example, in the Computer Literacy course, student assessment data was collected on student proficiency with Word, Excel, and PowerPoint. These individual assessments were entered into Banner with the cells being labeled Numeric 1, Numeric 2, Numeric 3. Lack of consistency among faculty invalidated these data as some faculty entered the scores based on the timing of the individual assessments, others entered scores based on alphabetical order of the software, and others were unsure of the ordering system they used.

No instructional changes were made in response to general education outcomes and the current standards were deemed appropriate for student learning in applicable courses. Data collection, entry, retrieval, and reporting methods were reviewed; options were investigated to improve the usefulness of the data.

## Analyses and Findings

### II-5. Report the results of each assessment by sub-groups of students, as defined in institutional assessment plans.

#### Core Outcome Assessment Results

OBJECTIVE AND COURSE IN WHICH ASSESSMENT OCCURS			Assessment Results		
			Passed	Total	Pass Percent
#1 COMMUNICATION	ENGL 1033	TECHNICAL WRITING I	160	203	78.82%
	ENGL 1113	FRESHMAN COMPOSITION I	373	430	86.74%
	ENGL 1213	FRESHMAN COMPOSITION II	358	409	87.53%
	ENGL 2033	TECHNICAL WRITING II	141	179	78.77%
	ENGL 3323	TECHNICAL WRITING III	43	52	82.69%
	SPCH 1113	INTRODUCTION TO SPEECH COMMUNICATIONS	280	311	90.03%
	SPCH 2313	SMALL GROUP COMMUNICATIONS	157	174	90.23%
		<b>SUBTOTAL</b>	<b>1512</b>	<b>1758</b>	<b>86.01%</b>
#2 CRITICAL THINKING	BIOL 1114	GENERAL BIOLOGY	119	125	95.20%
	MATH 1513	COLLEGE ALGEBRA	285	342	83.33%
	MATH 1613	TRIGONOMETRY	42	80	52.50%
	MATH 2003	BUSINESS MATHEMATICS	186	221	84.16%
	MATH 2144	CALCULUS I	9	12	75.00%
	MATH 2153	CALCULUS II	5	23	21.74%
	MATH 3103	DISCRETE MATHEMATICS	30	34	88.24%
	STAT 2013	ELEMENTARY STATISTICS	0	0	0.00%
	<b>SUBTOTAL</b>	<b>676</b>	<b>837</b>	<b>80.76%</b>	
#3 ETHICS & DIVERSITY	PHIL 1213	ETHICS	324	340	95.29%
		<b>SUBTOTAL</b>	<b>324</b>	<b>340</b>	<b>95.29%</b>
#4 HISTORY & GOVERNMENT	POLS 1113	US GOVERNMENT	433	453	95.58%
	HIST 1483	US HISTORY TO 1865	0	0	0.00%
	HIST 1493	US HISTORY SINCE 1865	401	408	98.28%
		<b>SUBTOTAL</b>	<b>834</b>	<b>861</b>	<b>96.86%</b>
#5 TECHNOLOGY	CS 1013	COMPUTER LITERACY & APPLICATIONS	356	385	92.47%
	ENGL 1213	FRESHMAN COMPOSITION II	358	409	87.53%
		<b>SUBTOTAL</b>	<b>714</b>	<b>794</b>	<b>89.92%</b>
#6 SERVICE LEARNING	POLS 1113	US GOVERNMENT	433	453	95.58%
	ORIE 1011	COLLEGE STRATEGIES	0	0	0.00%
		<b>SUBTOTAL</b>	<b>433</b>	<b>453</b>	<b>95.58%</b>
	<b>TOTAL</b>	<b>4493</b>	<b>5043</b>	<b>89.09%</b>	

**II-6. *How is student performance tracked into subsequent semesters and what were the findings?***

Deans and Assessment Committee members review the assessment process each summer in each program to track student performance year-by-year and trimester-by-trimester. Assessment scores were extracted from the student information system by the institutional research office for analysis in the program assessment review meetings. Agendas for the assessment review meetings were based on a five-year plan for strategic focus on one or two Core Outcomes each academic year. Members also considered the major issues affecting the programs for the current and upcoming academic years.

The focus for academic year 2020-2021 was on *Ethics* which primarily involves PHIL 1213 Ethics but is embedded in all subject areas. In spring 2020, faculty worked collaboratively to improve the common assessment in the course. Analyses of student performance suggested that the design of the assessment overemphasized procedures and formatting and did little to assess students' content knowledge and practices. The updated assessment was piloted in summer 2020 and fully implemented across all sections beginning fall 2020. Review of the data showed improvement in student performance holistically and demonstrated a need to disaggregate the information by each indicator on the rubric. Without specificity in the data, it is difficult to determine where students are succeeding and where additional instruction or direction may be needed.

**II-7. *Describe the evaluation of the general education assessment and any modifications made to assessment and teaching in response to the evaluation.***

The institutional Core Outcomes were revised by the Assessment Committee during the 2019-2020 academic year. No changes were recommended for Communication. For Critical Thinking, the committee removed the word "techniques" from the end of the outcome. Ethics and Diversity were determined to be two separate outcomes needing different assessments. History and Government was changed to "Civic Responsibility" to reflect the part of OSUIT's mission statement referring to our students as "...contributing members of society." The core outcome Technology was broadened to include capabilities beyond the student's industry or field of study. Service Learning was absorbed into the core outcome of Civic Responsibility. These changes took place as of the fall 2020 term. The Core Outcomes now read as follows:

1. Communication: Effectively communicate electronically, verbally, and in writing.
2. Critical Thinking: Demonstrate logical, systematic critical thinking.
3. Ethics: Demonstrate ethical behavior and decision-making.
4. Diversity and Inclusion: Practice inclusivity by supporting individual and cultural diversity.
5. Civic Responsibility: Contribute positively to community, society, and government.
6. Technology: Utilize technology to aid in the discovery, development, and purposeful application of knowledge and skills.

## Section III – Program Outcomes

### Administering Assessment

**III-1. List, in table format, assessment measures and number of individuals assessed for each degree program. Include graduate programs if applicable to the institutional assessment plan.**

#### Assessment by Program

School/Program (Assessments vary by program and are course embedded)		Assessment Results		
School	Program	Total Passed	Total Assessed	Pass Percent
Arts, Sciences & Health (SASH)	AAS in Culinary Arts	515	575	89.57%
	AAS in Nursing	410	449	91.31%
	AAS in Orthotic & Prosthetic Technologies	79	91	86.81%
	AS in Allied Health Sciences	598	668	89.52%
	AS in Business	198	219	90.41%
	AS in Enterprise Development	3	4	75.00%
	AS in Pre-Education	99	114	86.84%
	AS in Pre-Professional Studies	496	566	87.63%
	BT in Applied Technical Leadership	59	62	95.16%
	UND General Studies	683	734	93.05%
<b>SASH Total</b>		<b>3140</b>	<b>3482</b>	<b>90.18%</b>
Creative & Information Technologies (SCIT)	AAS in 3D Modeling & Animation	68	82	82.93%
	AAS in Graphic Design Technology	436	490	88.98%
	AAS in Information Technologies	1059	1261	83.98%
	AS in Information Technologies	4	4	100.00%
	BT in Information Technologies	932	1071	87.02%
<b>SCIT Total</b>		<b>2499</b>	<b>2908</b>	<b>85.94%</b>
Engineering & Construction Technologies (SECT)	AAS in Air Conditioning & Refrigeration Technology	368	432	85.19%
	AAS in High Voltage Line Technician	1230	1290	95.35%
	AAS in Construction Technology	763	900	84.78%
	AAS in Civil Engineering/Surveying Technologies	45	52	86.54%
	AAS in Engineering Graphics & Design Drafting Technologies	35	45	77.78%
	AAS in Engineering Technologies	517	598	86.89%
	AAS in Industrial Maintenance Technologies	442	491	90.02%
	AAS in Pipeline Integrity Technology	89	101	88.12%
	AAS in Power Plant Technology	152	181	83.98%
	BT in Civil Engineering Technology	1	1	100.00%
	BT in Instrumentation Engineering Technology	196	205	95.61%
<b>SECT Total</b>		<b>3838</b>	<b>4296</b>	<b>89.34%</b>
Transportation & Heavy Equipment (STHE)	AAS in Toyota T-TEN	91	100	91.00%
	AAS in MOPAR CAP	108	126	85.71%
	AAS in Ford ASSET	72	77	93.51%
	AAS in General Motors ASEP	47	57	82.46%
	AAS in Pro-Tech	67	98	68.37%
	AAS in CAT Dealer Prep	185	216	85.65%
	AAS in Komatsu ACT	115	132	87.12%
	AAS in Truck Technician	289	348	83.05%
	AAS in Western Equipment Dealers Association Technician	112	120	93.33%
<b>STHE Total</b>		<b>1086</b>	<b>1274</b>	<b>85.24%</b>
<b>Grand Total</b>		<b>10563</b>	<b>11960</b>	<b>88.32%</b>

The assessment measures vary from program to program. The measures included portfolios, research papers, persuasive speeches, service-learning projects, tests, labs, observation assessments, etc., and were tied to courses within each program. A review of program assessment data took place during the summer trimester. Changes were made to assessment

plans for the upcoming academic year based on this data, program advisory group recommendations, classroom observations, and changes within industry. All program outcomes were developed from school/program mission and vision statements and were directly linked to the university system missions and visions. These program outcomes were spelled out in the academic assessment plans.

### **III-2. *What were the analyses and findings from the program outcomes assessment?***

A cursory review of the data suggested that all data may not have been collected or may have been collected but not entered. Further, the placement of the data in the Banner student information system, based on numbering rather than labeling, could have polluted the data resulting in inaccurate information and misinterpretation of results. The Assessment Committee is currently investigating an alternative method for collecting and managing assessment data through a pilot program in the School of Arts, Sciences & Health.

#### School of Arts, Sciences & Health

Allied Health Sciences (AHS), Pre-Professional Studies (PREP), Pre-Education (PRED), Business (BUS), and Applied Technical Leadership (ATL) reviewed program outcomes and the validity of the assessment data. Recognizing the limitations of current data collection and the usefulness of such information, these programs worked collectively to revise program outcomes and assessment tools. As Associate in Science degrees, AHS, PREP, and PRED are comprised only of general education courses without any major-specific courses being offered at the 1000 and 2000 levels. Faculty representing these programs reviewed the general education outcomes and determined that alignment with general education outcomes was appropriate. A Strategic Decision and Action Committee was formed within SASH to review the adoption of general education outcomes for these programs. Currently consideration is being given to name the clustering of the AS degrees with general education, effectively serving as an all-encompassing title. BUS and ATL reviewed their program outcomes and refined their goals and objectives. BUS used DFWI data to prompt adjustments to their courses that included the removal of third-party software and included the use of Online Educational Resources (OER). Additionally, the ATL has titled their assessment of student learning tools as signature assessments and began piloting those tools in spring 2021.

#### School of Creative & Information Technologies

There is a general improvement in Information Technologies programs on the number of courses assessed as 'high risk' due to elevated DFWI rates on assessment measures. Analysis revealed that, within the ABET outcomes measured this year, most of the low assessment scores were concentrated in a handful of lower division courses. Further analysis is needed to determine the cause of these low assessment scores; however, it is suspected that inconsistencies in entering the information in Banner and low student participation may be the primary drivers. In 3D Modeling & Animation and Graphic Design Technology, program outcomes were evaluated as sufficient for the current academic year. Overall, the school has increased efforts in assessing student performance using DFWI rates and Canvas analytics. These tools have allowed for the triangulation of data and have been insightful in determining the usefulness of current student outcome data.

### School of Engineering & Construction Technologies

With the summer 2020 and fall 2020 trimesters being primarily online due to the pandemic, assessment scores for high-touch programs (e.g., Construction Management, High Voltage Line Technician, Electrical Construction, Natural Gas Compression) were negatively impacted. The need to maintain safety on-campus provided for limited first-hand experiences as OSUIT offered essential hands-on learning to small groups, allowing for 40 square feet for each person and approximately a quarter or less of the standard in-class/lab experiences. As many students' introduction to online course delivery began in June 2020, the school found that many students failed to submit assignments and scored low on assessments. Two key take-aways from the analysis of the data were the need for improved data collection and advisement practices. Having access to only summative scores prohibited faculty from identifying key points where students were struggling. The need for all rubric information to be viewed and compared was identified as an improvement to be made to assessment practices. Additionally, with all courses online, faculty had a broader understanding of the demands of general education courses on their students' time. When reviewing DFWI rates of SECT students in general education courses, it became apparent that students taking high-demand courses (e.g., Freshmen Composition I, College Algebra) simultaneously were less successful than those whose schedules were more balanced. Currently, the school is reviewing its advising practices and course sequencing.

### School of Transportation & Heavy Equipment

In concert with SECT, STHE students were disadvantaged by the move to online and faculty became aware of the demands on students' time by non-major specific courses. The school is in the process of reviewing its advising practices and course sequencing to provide students a balanced schedule.

### **III-3. *What instructional changes occurred or are planned in the programs in response to program outcomes assessment?***

With concern surrounding assessment of student learning data, the programs have focused on data collection, management, and utilization. The Deans and Assistant Deans from each of the four schools gathered to discuss current practices and opportunities for improvement. A decision to move out of Banner beginning fall 2021 and to utilize the learning management system was made. Specifics as to responsible parties and processes are being drafted with the goal of improving data quality and usefulness. Faculty have been encouraged to use Canvas analytics to identify patterns of behavior, high fail and high success assignments, student participation rates, and trends in grading for all of their courses and to respond, as appropriate, by adjusting their practices, improving assignment directions, providing information through multiple modalities, and engaging with the students. While no instructional changes were specified by the programs, data collection, entry, retrieval, and reporting methods are being reviewed and options are being investigated to improve the usefulness of the data.

## Section IV – Student Engagement and Satisfaction

### Administration of Assessment

#### IV-1. *What assessments were used and how were the students selected?*

**Course Evaluations** – At the end of each term (based on seven-week or full trimester classes), all students were asked to voluntarily complete a course evaluation for each class in which they were enrolled. Administration of course evaluations using the *Class Climate Course Evaluation System* (Scantron) for all credit-bearing classes began in summer 2017 and continues to present. The response rate for academic year 2020-2021 increased to 52.2 percent (up from 46.2 percent in 2019-2020).

**Graduation Survey** – Each graduating student was asked to complete the *Graduation Survey* during their last trimester at OSUIT prior to graduation. Administrative assistants and program advisors directed students who applied for graduation to complete a *Graduation Survey* preferably within the last two weeks before graduation. The response rate for academic year 2020-2021 was 42.5 percent (down from 47.1 percent in 2019-2020).

**Student Satisfaction Inventory (SSI) and Priorities Survey for Online Learners (PSOL)** – The *SSI* and *PSOL* are nationally recognized instruments comparing institutional data with normative data collected from other institutions for benchmarking purposes. The instruments use Likert-type ratings of satisfaction for comparisons of means while also gathering data on the importance of the mean scores for context. Results from the OSUIT campus were compared to national norms, while two-year and five-year trends within the institution were identified from previous years' administrations of these instruments.

The paper version of the *SSI* was administered in spring of 2021; 41 courses were selected using a stratified random sampling method. Administration of the 40-item paper version yielded a response rate of 77.6 percent. The *PSOL* was implemented to gather satisfaction information based on the experiences of students in classes with an online component. All students enrolled in a computer-based online or hybrid course were invited to participate in the online administration of the *PSOL*. The response rate for the 2021 administration of the *PSOL* was 13.2 percent.

**OSUIT Alumni Survey** – The *Alumni Survey* was developed in-house and includes scales for satisfaction in retrospect regarding 1) work-related skills, 2) the educational experience, and 3) educational goals, as well as three summary items reflecting overall satisfaction with OSUIT. The response rate for the 2020 *Alumni Survey* was 8.6 percent.

**Community College Survey of Student Engagement (CCSSE)** – Every third year beginning in 2015, OSUIT has participated in CCSSE which assesses institutional practices and student behaviors that are highly correlated with student learning and student retention. Typically, as established by the Center for Community College Student Engagement, courses are randomly selected for participation in CCSSE during the spring term with non-credit, dual-enrollment, distance learning, and individual study courses being excluded. However, as a result of the COVID-19 pandemic, schools were invited to participate in an online method of administering the CCSSE. All OSUIT students were invited by email to participate on their own time. CCSSE typically results in a relatively high response rate; with the online version of CCSSE, the participation rate was 18.9 percent, far less than the previous in-class administrations of this survey.

#### IV-2. *What were the analyses and findings from the student engagement and satisfaction assessment?*

Course evaluations were used to elicit discussion between faculty and the deans of their respective schools regarding strengths, challenges, and overall classroom management. Reports identifying instructors with consistently high scores and those with challenges were provided to the Vice President of Academic Affairs. Results of course evaluations at OSUIT are not shared publicly, but they form the basis for educational changes on an individual basis via feedback for each instructor.

The satisfaction scales on the *Graduation Survey* revealed varied responses from graduating students in almost every area of the college experience. In terms of academics, highest satisfaction continues for “Professionalism of instructors” and “Quality of instructors in my major program of study.” Highest satisfaction dealing with campus services was reported for the *bookstore* and *cafeteria*. In Student Services, the highest satisfaction was found for the *Bursar’s office*. The most student involvement in extracurricular activities was reported for *free food events*. General feedback from students reveals highest satisfaction for how “OSUIT helped me gain the proper skills needed for my chosen career.”

On the *Student Satisfaction Inventory (SSI)*, OSUIT benchmark comparisons with the national group showed that OSUIT generally matched the national benchmark for *Academic Advising Effectiveness*. The year-to-year comparison at OSUIT revealed that satisfaction in 2021 increased in the area of *Safety and Security* (mean difference = 0.34,  $p < .001$ ). Students reported that the prospect of *future career opportunities*, *cost*, *academic reputation*, and *financial assistance* were the most important factors in deciding to enroll at OSUIT.

For online learners responding to the *Priorities Survey for Online Learners (PSOL)*, satisfaction results were mixed at the item level compared to the results from 2020. The benchmark national group, on average, was more satisfied than OSUIT online learners. OSUIT responses this year, as in most years, continue to reflect similar concerns as those of the national comparison group while also continuing to run slightly lower both on satisfaction and on importance. Again, online students send a clear message through the strengths and challenges identified by this survey. For online learners, ease of use was most important to them and they were most satisfied in this area. *Program advisor accessibility*, *convenience in the registration, billing/payment processes*, and *bookstore services* received appreciation as important areas for students in which they were likewise satisfied with the results. Although *accessibility of program advisors by phone or email* was listed as a strength, *faculty and institutional responsiveness to students* was seen as a challenge.

The *Alumni Survey* results for 2021 showed increased satisfaction for most items in the area of *work-related skills* with substantial increases in satisfaction with the development of *communication*, *leadership*, and *problem-solving skills*. Alumni also reported generally higher satisfaction this year with their educational experiences at OSUIT and particularly for *instructors’ knowledge of their subject areas* and *willingness to help students meet their educational goals*. Alumni were also generally satisfied with experiences that led to the attainment of educational goals in preparation for employment; however, alumni were less satisfied with OSUIT in terms of *gaining the proper skills needed for their chosen careers*. The survey ended with three summary items that provide an overall picture of alumni attitudes toward OSUIT; on these, alumni appeared more reserved about *recommending OSUIT to family and friends* and less satisfied with their education from OSUIT compared to results from the previous year.

Students who completed the *Community College Survey of Student Engagement (CCSSE)* reported on aspects of student engagement and comparison against national benchmarks led to these aspects being identified as either “strengths” or “weaknesses.” Strengths identified by OSUIT students included collaboration with classmates, contributing to class discussions, academic rigor, classroom requirements for writing, prompt feedback from instructors, and integration with a diverse population was encouraged. Areas of focus for improvement included students needing to be more prepared for class, needing to make better use of academic services such as tutoring and computer labs; OSUIT needing to place more emphasis on career counseling, academic advisement, and financial support.

The Institutional Research page of the OSUIT website provides links for each of the reports and instruments on satisfaction and engagement mentioned above.

**IV-3. *What changes occurred or are planned in response to the student engagement and satisfaction assessment?***

Academic advisement and career counseling were identified as a weakness in the assessments and align with the needs identified by the schools regarding student schedules. The largest school, School of Arts, Sciences & Health, recognized the need for a dedicated advisor and hired a Student Success and Career Advisor in fall 2020. This person is tasked with the responsibility of advising current students as to their academic choices, availability of courses, requirements for graduation, industry demands, and career opportunities. To date, this role does not exist in the other schools and faculty or administrative assistants are serving as students’ academic advisors. In continually looking for ways to improve, OSUIT has partnered with the Gardner Institute to investigate current advising practices and opportunities for improvement. The information gathered from the Gardner Institute’s focus groups and surveys, along with the student engagement and satisfaction assessment for 2021-2022, should provide the schools with a comprehensive understanding of current practices and the impact of those practices on student performance and satisfaction. Such information is expected to be enlightening and to provide direction as to where the university should be aiming in best serving students’ academic and career needs.

**Section V – Assessment Budgets**

***Provide the following information regarding assessment fees and expenditures for 2020-2021:***

Assessment fees	\$65,000
Assessment salaries	\$106,748
Distributed to other departments	-0-
Operational costs	\$33,000
Total Expenditures	\$139,748

Respectfully submitted December 2, 2021  
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