The Mesa Community College Program to Assess Student Learning

Annual Report AY 2022-2023

Prepared by:
Office of Institutional Effectiveness

June 2024

Mesa Community College
1833 W. Southern Avenue
Mesa, Arizona 85202

MCC at Red Mountain
7110 East McKellips Road
Mesa, Arizona 85207

Office of Institutional Effectiveness

https://www.mesacc.edu/about/office-
institutional-effectiveness

Table of Contents

I. Introduction and Background

History and Overview of Assessment

Mesa Community College (MCC) is committed to providing quality education for its students as evidenced in our institutional mission: "We create an inclusive and vibrant learning community where everyone is supported to achieve success." The college recognizes the need for accurate assessment data to use in evaluating student learning and the effectiveness of the College in meeting its mission. MCC accepts the proposition that the value of assessment is found in the use of the assessment data to improve student learning.

MCC conducts student outcomes assessment at the institutional (ISLO), program/pathway (PSLO), and course (CSLO) levels. Assessment efforts are led via collaborative efforts of the Vice President of Academic Affairs (VPAA), Director of Assessment, Faculty Senate Student Outcomes Committee (SOC), and the Office of Institutional Effectiveness.

Starting in the late 1990s, MCC's student learning outcomes were assessed college-wide through "Assessment Week." In the Fall 2012, challenges in the assessment work were identified, motivating revisions to our institutional student learning outcomes and assessment method. SOC and Faculty Senate approved a revision of the general education outcomes to better focus on student success. MCC's ISLOs became MCC's 4Cs: Communication, Civic Engagement, Critical Thinking, and Cultural and Global Engagement, with each outcome having several criteria. MCC's 4Cs uses standardized scoring guidelines assessment instead of standardized assessment test. This allows instructors to apply the assessment results to their course content and pedagogical practice.

In 2017, MCC developed Guided Pathways for its academic programs, which were adopted and expanded by the District in 2018. Each guided pathways program map includes Program-level Student Learning Outcomes (PSLOs).

In 2018, MCC hired an Assessment Director to lead the collaborative development and implementation of a comprehensive plan for assessing student learning outcomes at the course, program, educational pathway, and institutional levels.

Organizational Structure for Assessment

Assessment efforts are led via collaborative efforts of the Vice President of Academic Affairs (VPAA), Director of Assessment, Faculty Senate Student Outcomes Committee (SOC), and the Office of Institutional Effectiveness.

The Student Outcomes Committee is composed of faculty from many disciplines, and confers regularly with the Faculty Senate. The Assessment Director, and the Dean and Director of OIE serve on the committee to ensure that assessment processes and methodologies reflect good practice, including adherence to guidelines for ethical research. Since 2015, a primary focus of SOC has been the assessment of the Institutional Student Learning Outcomes (ISLOs), MCC's 4Cs.

The Assessment Director leads the development and implementation plan for the assessment of student learning at the course, program/pathway, co-curricular and institutional levels. The Assessment Director works and collaborate with faculty, administrators, the Center for Teaching and Learning (CTL) and OIE to develop an assessment plan and promote a culture of assessment at MCC. The Director of Assessment works with and support the Student Outcomes Committee and Department Assessment Coordinators (DACs) on assessment efforts at MCC.

MCC's process to assess student learning has engages full-time and part-time faculty through regular meetings of the committee, and through the participation of many academic and occupational faculty events.

II. MCC's 4Cs Development Process

The process began by following the informed improvement strategy. Each of the original student learning outcomes and descriptors were reviewed and evaluated. Common descriptors were eliminated while at the same time linking the new outcomes to the college's Vision, Mission and Value (VMV) statements. The linkage to the MCC's VMV insured fluid integration of institutional student learning outcomes into the college plan. MCC's 4Cs were created: Communication (CO), Critical Thinking (CT), Civic Engagement (CE), and Cultural and Global Engagement (CG).

Groups were formed for each outcome; faculty from both Southern and Dobson and Red Mountain campuses were invited, and participated, in the development of the outcomes clear definitions, the criteria to assess it and scoring guidelines. Scoring guidelines were patterned after the Association of American Colleges and Universities (AACU) and Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics. On December 5, 2013 MCC's 4Cs were adopted by unanimous approval from Faculty Senate.
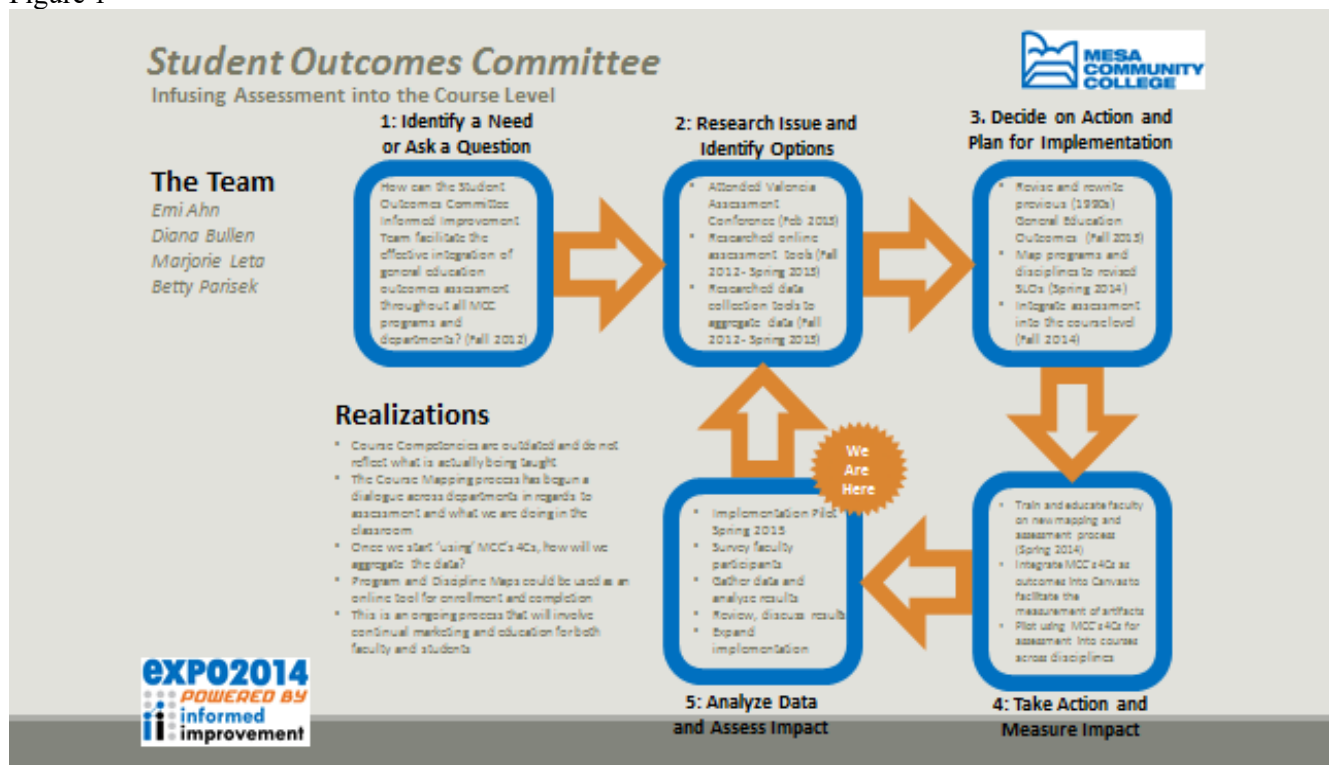MCC's 4C's development process shown below:

Figure 1

Figure 2

Mesa Community College: Institutional Student Learning Outcomes "MCC's 4Cs"	
The following Institutional Student Learning Outcomes are consistent with the Vision, Mission, and Values of both the Maricopa Community Colleges District and Mesa Community College, and reflect our commitment to Individual and Community, Innovation, Integrity, Learning, and Service Excellence.	
COMMUNICATION (CO) **Institutional Learning Outcome:** The purposeful development, expression and reception of a message through oral, written or nonverbal means. **1. PURPOSE:** Establish a clear central focus for a message which demonstrates an understanding of context, audience, and task **2. CONTENT:** Develop appropriate, relevant content logically sequencing ideas and/or information **3. LANGUAGE:** Apply language and/or modes of expression of a discipline in an appropriate and accurate manner to demonstrate comprehension **4. EXECUTION:** Convey a message effectively	**CIVIC ENGAGEMENT (CE)** **Institutional learning Outcome:** Civic engagement encompasses actions to promote the quality of life in a community, through both political and non-political processes. **1. INCLUSIVENESS:** Demonstrate an ability to engage respectfully with others in a diverse society **2. APPLY KNOWLEDGE:** Apply knowledge from one's own study and experiences to active and ethical participation in civic life **3. DEMONSTRATION OF CIVIC IDENTITY AND COMMITMENT:** Provide evidence of experience in and reflection on civic engagement activities **4. CIVIC COMMUNICATION:** Communicate and listen to others in order to establish personal and professional relationships to further civic action **5. ENGAGEMENT IN CIVIC ACTION AND REFLECTION:** Demonstrate the ability to deliberate and collaborate on issues and problems to achieve a civic aim
CRITICAL THINKING (CT) **Institutional Learning Outcome:** Habit of mind of analyzing issues, ideas, artifacts, events, and/or evidence to draw conclusions or solve problems. **1.** Identify the topic/ subject of inquiry **2.** Select appropriate resources required to draw conclusion(s) or solve the problem **3.** Apply resources to draw conclusion(s) or solve the problem **4.** Evaluate conclusion(s) or the solution to the problem *Revised AY 2017-2018*	**CULTURAL AND GLOBAL ENGAGEMENT (CG)** **Institutional learning Outcome:** Global Learning encompasses knowledge, skills, and attitudes students acquire through a variety of experiences that enable them to understand world cultures, analyze global systems, appreciate cultural differences, and apply this knowledge and appreciation to their lives as educated individuals and global citizens. **1. KNOWLEDGE**: Analyzes cultural systems, events, or creations and their relationship to worldviews, values, or behavior. **2. INFLUENCES:** Evaluates the impact of contemporary and past events, perspectives, or cultures on intercultural relationships. **3. SELF AWARENESS**: Analyzes the impact of culture and intercultural experiences on one's worldview, values and behavior, including assumptions, biases, prejudices, or stereotypes. **4. RESPONSIBILITY**: Evaluates the impact of one's moral and ethical reasoning on one's actions in relation to culturally different groups. **5. CULTURAL EXPRESSION:** Generates ideas, creations, or models that express the human condition and one's relationship with the world

III. Methodology

During the semesters of Fall 2022 and Spring 2023 (AY 2022-2023), SOC invited all residential, one year only, one semester only, and adjunct faculty to participate in MCC's 4Cs assessment. SOC members promoted participation in assessment activities, lead faculty through the assessment process, and provided guidance in the creation of a signature assignment aligning to the scoring guidelines.

Faculty participants identified a 'C' that best aligned with their course. The faculty chose an assignment within their course that aligned with all criteria of the chosen outcome. Faculty attached the 'C' scoring guidelines to the course assignment in Canvas. Using Canvas students assessed in a 'C' were given a rate of Levels 0 through 4, with level 4 being the highest level of achievement. The data collected in Canvas for each semester was exported, combined into one dataset, aggregated and analyzed using Excel, MCCCD Institutional Research Information System (IRIS), and Tableau.

College level and course level 'C' averages were calculated. The average scores range from zero to four, with four being the highest level of achievement.

The scoring guidelines were revised in AY 2017-2018 and implemented Fall 2018. Some faculty used the newly revised scoring guidelines and others used the prior set of scoring guidelines. When reporting average scores, only data from the new scoring guidelines were analyzed.

Data Collection Procedures

63 faculty members volunteered to administer MCC's 4C's assessment in a total of 181 sections at Southern and Dobson, Red Mountain, Online, and Downtown during AY 2022-2023. Faculty administered all assessments in regular class sessions during each semester.

Administration of the assessment occurred during the regular classroom period. Faculty utilized an assignment which had already been created or they created a new assignment that best aligned with one of the MCC's 4Cs. Students were informed that the purpose of the assessment was to measure whether education goals are being achieved in order to improve programs and student learning at MCC.

Faculty administered and scored the assessments using Canvas by the end of the Fall and Spring semesters. At the end of the semesters, OIE exported an Outcomes Report from Canvas into Excel. The reports contained student names, course name, section number, learning outcome, outcome score, and title of assignment. The exported data were used to match each student's assessment with exact demographic and course data using IRIS.

Student Profile of MCC's 4Cs AY 2022-2023

Table 1

Student Profile of AY 2022-2023 Assessments and College		
	AY 2022-2023 Assessment	**Total College (Fall 2022 45th day)**
Headcount (Unduplicated)	2,098	15,772
Ethnicity		
American Indian	2.3%	3.0%
Asian & Pacific Islander	5.4%	5.0%
Black/African American	5.7%	5.3%
Hispanic/Latino	34.0%	33.9%
Not Specified	1.7%	2.1%
Multi-racial/ethnic	4.7%	4.8%
White	46.2%	45.9%
Gender		
Female	62.4%	54.2%
Male	36.3%	44.6%
Other/Unknown	1.3%	1.2%
Age Group		
Under 18	2.8%	15.5%
18-19	29.8%	21.1%
20-24	39.8%	30.6%
25-29	11.7%	11.9%
30-39	10.9%	11.7%
40-49	4.1%	4.9%
50-59	1.1%	2.5%
60+	0.6%	1.6%
Primary Time of Attendance		
Day	44.2%	38.4%
Evening	5.4%	10.4%
Non-Traditional	49.3%	49.8%
Weekend	0.9%	1.3%
None/Unknown	1.3%	-
Academic Load		
Full Time	43.8%	26.1%
3/4 Time	28.1%	16.5%
Half-Time	17.1%	22.4%
Less than Half-Time	12.9%	35.0%

IV. Overall Summary of Results

Faculty Participation

Table 2 shows both, residential and adjunct faculty participation in MCC's 4C's from the pilot semester in Spring 2015 through AY 2022-2023.

Table 2

Faculty Participation									
	Spring 2015 Pilot	**AY 2015-2016**	**AY 2016-2017**	**AY 2017-2018**	**AY 2018-2019**	**Fall 2019**	**AY 2020-2021**	**AY 2021-2022**	**AY 2022-2023**
Number of Residential Faculty Participants	33	71	98	136	120	73	44	44	45
Residential Faculty*	341	323	303	306	301	295	310	321	315
4Cs Residential Faculty Participation Rate	*9.68%*	*21.98%*	*32.34%*	*44.44%*	*39.87%*	*24.7*	*14.2%*	*13.7%*	*14.3%*
Number of Adjunct Faculty Participants	2	31	40	97	92	49	46	34	19
Adjunct Faculty	861	812	598	673	686	833	680	712	755
4Cs Adjunct Faculty Participation Rate	*0.23%*	*3.81%*	*6.69%*	*14.41%*	*13.41%*	*5.9*	*6.8%*	*4.8%*	*2.5%*

*Source: MCC HR, Spring 2015 - Fall 2019 actively filled faculty positions (Residential and OYO). Source: IRIS, MCC Faculty Staffing Dashboard, AY 2001-2021 – AY 2022-2023.

Due to the Covid-19 pandemic Fall 2019 was the only semester reported for AY 2019-2020.

Department Participation

2,098 students were assessed for AY 2022-2023, a 6.1% decrease from AY2021-22. The number of departments that assessed decreased by 1. The number of courses decreased 12.2% in AY 2022-2022. There was an 25.4% decrease in the number of sections that participated from AY 2021-2022 to AY 2022-2023.

Table 3

Department Participation									
	Spring 2015 Pilot	**AY 2015-2016**	**AY 2016-2017**	**AY 2017-2018**	**AY 2018-19**	**Fall 2019**	**AY 2020-2021**	**AY 2021-2022**	**AY 2022-2023**
Number of Students Assessed	871	3,061	4,576	7,197	7,058	3,082	3,416	2,235	2,098
Number of Departments	12	17	17	19	19	19	18	17	16
Number of Courses	33	88	134	214	208	97	79	74	64
Number of Sections	64	235	324	613	639	219	309	244	181

Analysis Highlights

- 2,098 students were assessed in 64 courses by 16 departments
- 45 residential and 19 adjunct faculty administered the assessments in 181 sections
- 349 students were assessed in Civic Engagement
- 996 students were assessed in Communication
- 1,073 students were assessed in Critical Thinking
- 203 students were assessed in Cultural and Global Engagement

V. Results and Observations

Overall Results

Students may have been given an MCC's 4Cs assessment in more than one course, therefore, the # of students in each table in this section of the report are a duplicate count of students. Table 4 provides the departments, the number of instructors, number of courses, number of sections and the number of students assessed AY 2022-2023. Instructors may have taught for 1 or more departments; therefore, the # of instructors are duplicated in Table 4.

Table 4

AY 2022-2023- Assessments Administered by Department				
Department	**# Of Instructors**	**# Of Courses**	**# Of Sections**	**# Of Students**
Allied Health	2	4	4	17
Applied Sciences and Technology	1	3	5	90
Art	3	3	3	42
Business	3	7	26	339
Communication, Theatre & Film Arts	11	10	26	265
Computer Information Systems	2	2	3	31
Counseling	1	1	1	3
Cultural Science	2	3	11	167
Education Studies	5	5	9	65
English	5	10	22	223
Exercise Science	1	2	3	25
Life Science	3	2	13	250
Nursing	10	3	9	189
Psychological Science	9	5	12	153
Reading	4	2	28	317
World Languages	2	3	8	79
Total	**64**	**65**	**183**	**2,255**

Table 5 shows the department, number of courses assessed, number of courses offered (excluding OE sections, Cancelled sections, HS Dual sections) and the percentage of courses assessed in AY 2022-2023.

Table 5

AY 2022-2023 – Courses Offered and Assessed						
Department	**# of Courses Assessed**	**# of Active Courses Offered**	**% of Courses Assessed**	**# of Active Sections Assessed**	**# of Sections Offered**	**% of Sections Assessed**
Allied Health	2	48	4.2%	4	138	2.9%
Applied Sciences and Technology	1	189	2.5%	5	619	0.8%
Art	3	49	6.0%	3	235	1.3%
Business	3	77	8.5%	26	291	8.9%
Communication, Theatre & Film Arts	11	37	21.4%	26	272	9.6%
Computer Information Systems	2	65	5.5%	3	333	0.9%
Counseling	1	15	18.8%	1	239	0.4%
Cultural Science	2	54	11.5%	11	241	4.6%
Education Studies	5	25	52.0%	9	98	9.2%
English	5	66	4.1%	22	534	4.1%
Exercise Science	1	73	3.5%	3	225	1.3%
Life Science	3	11	28.6%	13	397	3.3%
Nursing	10	18	10.0%	9	156	5.8%
Psychological Science	9	15	6.3%	12	188	6.4%
Reading	4	5	60.0%	28	93	30.1%
World Languages	2	26	3.4%	8	113	7.1%
Total	**64**	**773**	**8.3%**	**183**	**4,172**	**4.4%**

Note: The table does not include departments that did not assess during AY 2022-2023

Table 6 shows the number of sections that administered at least one of the MCC's 4C's by location from Spring 2015 through AY 2022-2023. MCC's 4C's were administered in a total of 76 sections at Southern and Dobson. Internet administered the assessment in a total of 100 sections in AY 2022-2023.

Table 6

Section Participation by Location									
	Spring 2015 Pilot	**AY 2015- 16**	**AY 2016-17**	**AY 2017-18**	**AY 2018-19**	**Fall 2019**	**AY 2020-21**	**AY 2021-22**	**AY 2022-23**
Location	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**
Southern and Dobson	43	149	224	439	427	151	106	101	76
Red Mountain	7	12	26	40	46	13	1	12	5
Internet	14	73	73	117	156	54	201	130	100
Downtown & Offsite	-	1	-	17	-	1	4	1	1
HS Dual	-	-	1	-	10	-	-	-	-
Total	**64**	**235**	**324**	**613**	**639**	**219**	**312**	**244**	**182**

The table below shows the number of sections that administered at least one of the MCC's 4C's from Spring 2015 through AY 2022-2023 by instructional mode.

Table 7

Section Participation by Instructional Mode									
	Spring 2015 Pilot	**AY 2015-16**	**AY 2016-17**	**AY 2017-18**	**AY 2018-19**	**Fall 2019**	**AY 2020-21**	**AY 2021 – 22**	**AY 2022-23**
Instr. Mode	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**	**# of Sections**
Field Based	-	1	1	6	5	-	2	5	4
Hybrid	7	21	32	56	68	25	8	48	17
Internet	14	73	73	117	156	54	201	130	100
Live Online	-	-	-	-	-	-	95	22	5
In Person	43	139	218	432	405	140	6	39	56
Ind. Study	-	1	-	2	5	-	-	-	-
Total	**64**	**235**	**324**	**613**	**639**	**219**	**312**	**244**	**182**

Table 8 shows the college – wide average of MCC's 4Cs for all locations.

The data in Table 8 shows the number of students, number of assessments, and the college-wide average for MCC's 4C's. The number of students is duplicated are duplicated.

Table 8

AY 2022-2023 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	349	390	**3.30**
Communication	996	1,107	**3.17**
Critical Thinking	1,073	1,699	**3.37**
Cultural and Global Engagement	203	222	**2.47**
Total	**2,621**	**3,418**	**-**

Note: The average is on a scale from zero to four with four being the highest level of achievement

Chart 1 shows the percentage of assessment scores for each Level by MCC's 4C.

Chart 1
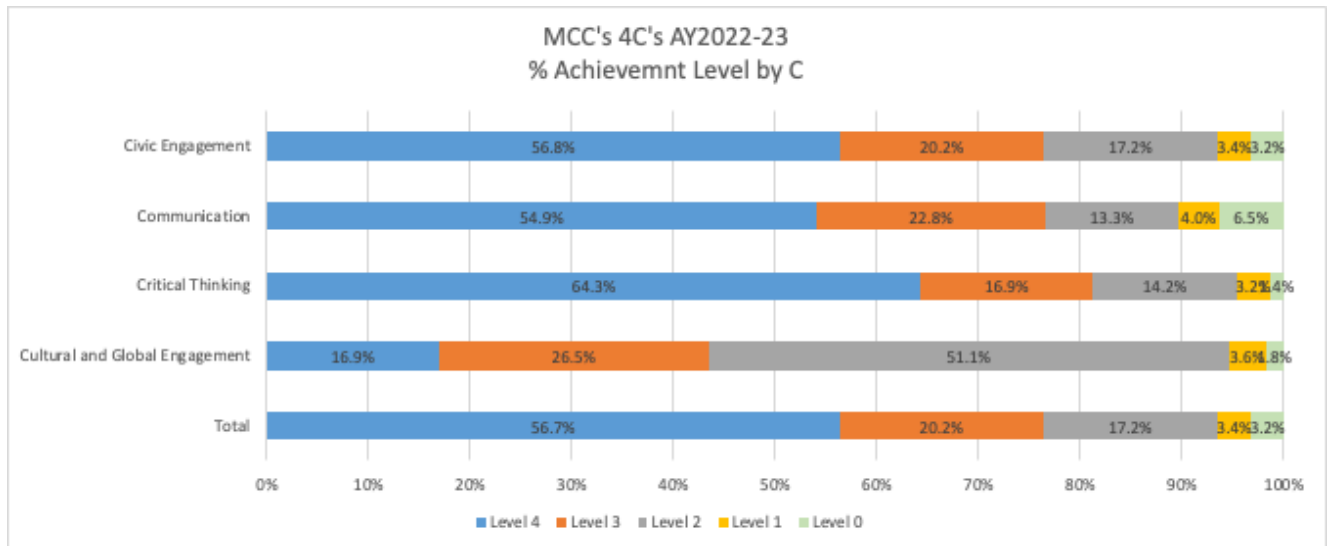
- 56.8% of Civic Engagement assessments were rated at Level 4
- 54.9% of Communication assessments were rated at Level 4
- 64.3% of Critical Thinking assessments were rated at Level 4
- 16.9% of Cultural and Global Engagement assessments were rated at Level 4
- Total of 56.7% of all MCC's 4C's assessments were rated level 4

Civic Engagement

Definition
Civic Engagement: Civic engagement encompasses actions to promote the quality of life in a community, through both political and non-political processes.

Descriptors
1. INCLUSIVENESS: Demonstrate an ability to
engage respectfully with others in a diverse society
2. APPLY KNOWLEDGE: Apply knowledge from one's
own study and experiences to active and ethical participation in civic life
3. DEMONSTRATION OF CIVIC IDENTITY AND
COMMITMENT: Provide evidence of experience in and reflection on civic engagement activities
4. CIVIC COMMUNICATION: Communicate and listen to
others in order to establish personal and professional relationships to further civic action
5. ENGAGEMENT IN CIVIC ACTION AND REFLECTION: Demonstrate the ability to deliberate and
collaborate on issues and problems to achieve a civic aim

Civic Engagement Results
Table 9 shows the college-wide Civic Engagement learning outcome score for AY 2022-2023.
In calculating the average score, blanks were given a score of zero. Therefore, the average score is on a scale of 0 to 4, with four being the highest level of achievement.

Table 9

AY 2022-2023 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	349	390	3.30

Chart 2 shows the percentage of students scoring at each Level per descriptor.

Chart 2

Civic Engagement

	Level 4	Level 3	Level 2	Level 1	Level 0
CE1: Inclusiveness	68.8%	20.5%	8.8%	1.5%	4.4%
CE2: Application of Knowledge	51.7%	26.1%	18.4%	3.4%	3.9%
CE:3 Demonstration of Civic Identity and Commitment	56.4%	26.5%	14.2%	2.5%	3.9%
CE4: Civic Communication	55.6%	27.1%	15.0%	1.9%	3.9%
CE5: Engagement in Civic Action and Reflection	51.3%	25.7%	16.8%	2.1%	4.2%
Total	56.8%	25.1%	14.6%	2.3%	4.0%

- All descriptors assessed most student assessments at a Level 4

Communication

Definition

Communication: The purposeful development, expression and reception of a message through oral, written or nonverbal means. See Appendix A for Scoring Guidelines.

Descriptors
1. PURPOSE: Establish a clear central focus for a message which demonstrates an understanding of context, audience, and task
2. CONTENT: Develop appropriate, relevant content logically sequencing ideas and/or information
3. LANGUAGE: Apply language and/or modes of expression of a discipline in an appropriate and accurate manner to demonstrate comprehension
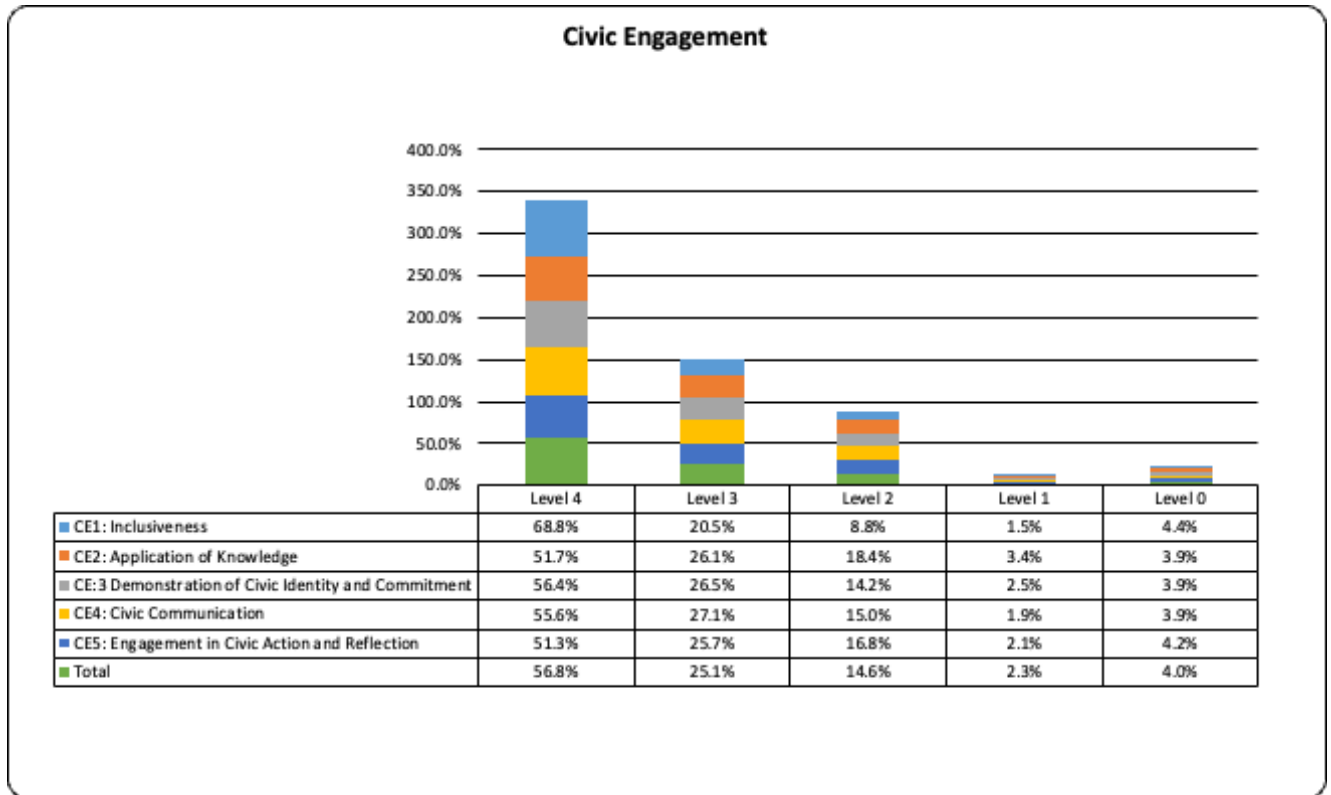4. EXECUTION: Convey a message effectively

Communication Results
Table 10 shows the college-wide Communication learning outcome score for AY 2022-2023.
In calculating the average score, blanks were given a score of zero. Therefore, the average score is on a scale of 0 to 4, with four being the highest level of achievement.

Table 10

AY 2022-2023 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Communication	996	1,107	3.17

Chart 3 shows the percentage of students scoring at each Level per descriptor.

Chart 3

	Level 4	Level 3	Level 2	Level 1	Level 0
CO1: PURPOSE	61.5%	15.4%	12.8%	4.1%	6.6%
CO2: CONTENT	54.4%	24.3%	13.3%	4.2%	6.4%
CO3: LANGUAGE	56.9%	23.1%	12.0%	3.8%	6.4%
CO4: EXECUTION	46.9%	28.5%	15.1%	4.0%	6.4%
Total	54.9%	22.8%	13.3%	4.0%	6.5%

- All descriptors assessed most student assessments at a Level 4

Critical Thinking

Definition
Critical Thinking: Habit of mind of analyzing issues, ideas, artifacts, events, and/or evidence to draw conclusions or solve problems.

Descriptors
1. Identify the topic/ subject of inquiry
2. Select appropriate resources required to draw conclusion(s) or solve the problem
3. Apply resources to draw conclusion(s) or solve the problem
4. Evaluate conclusion(s) or the solution to the problem

Critical Thinking Results

Table 11 shows the college-wide Critical Thinking learning outcome score for AY 2022-2023.

In calculating the average score, blanks were given a score of zero. Therefore, the average score is on a scale of 0 to 4, with four being the highest level of achievement.
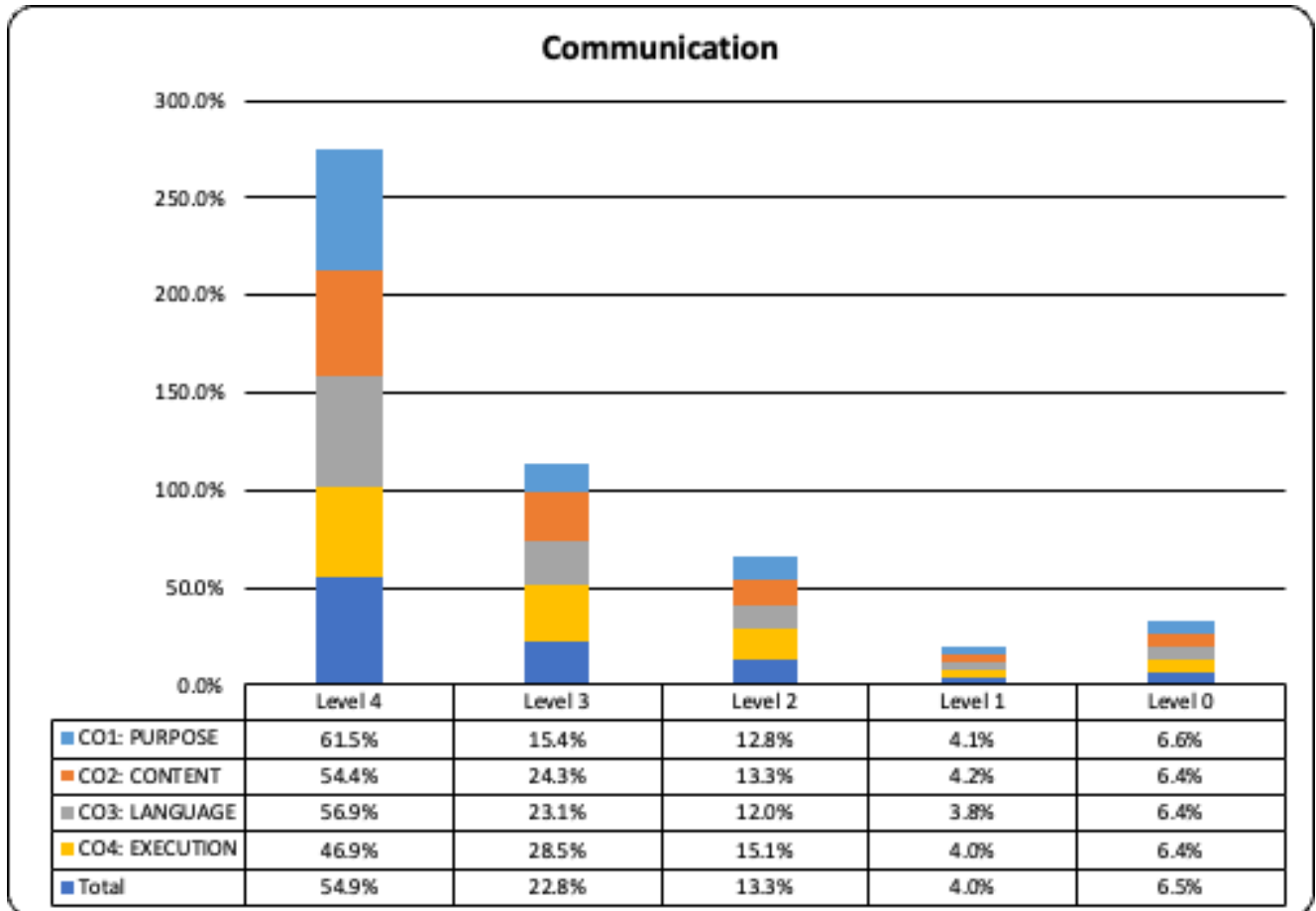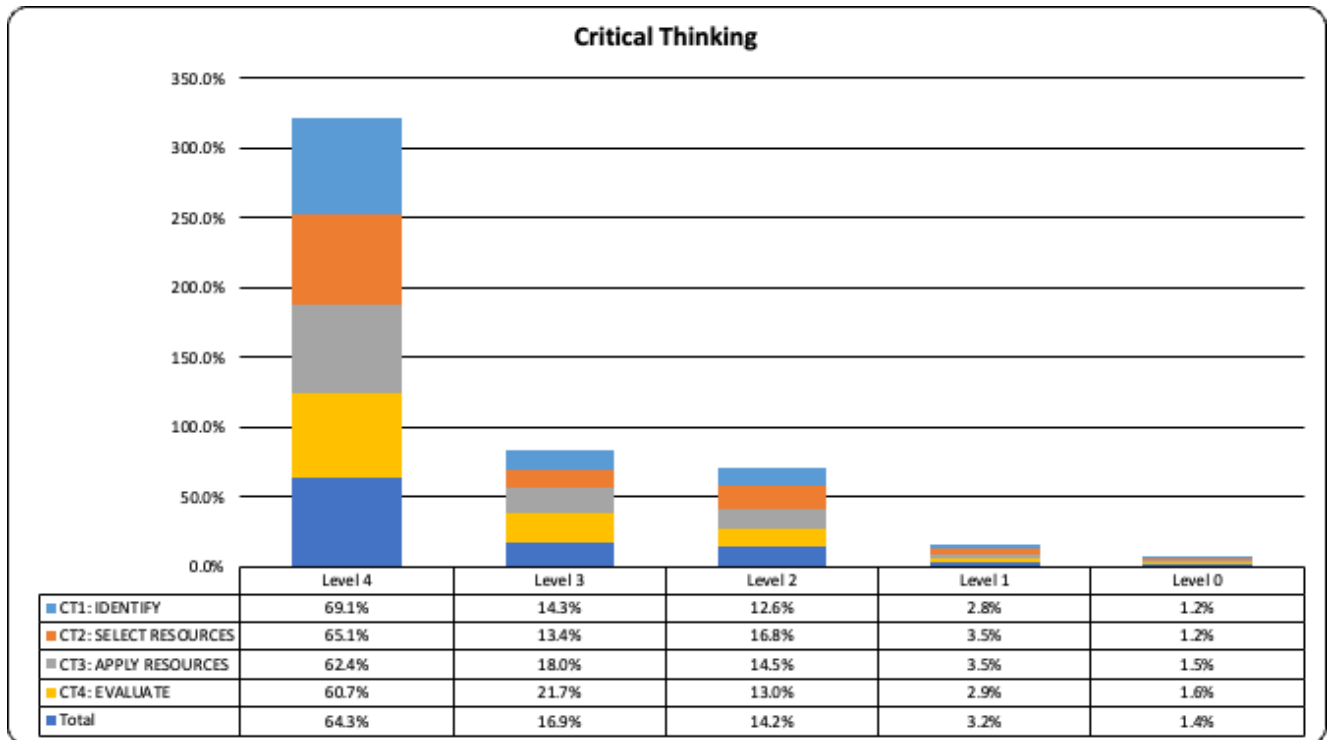
Table 11

AY 2022-2023 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Critical Thinking	1,073	1,699	3.37

Chart 4 shows percentage of students scoring at each Level per descriptor.

Chart 4

Critical Thinking

	Level 4	Level 3	Level 2	Level 1	Level 0
CT1: IDENTIFY	69.1%	14.3%	12.6%	2.8%	1.2%
CT2: SELECT RESOURCES	65.1%	13.4%	16.8%	3.5%	1.2%
CT3: APPLY RESOURCES	62.4%	18.0%	14.5%	3.5%	1.5%
CT4: EVALUATE	60.7%	21.7%	13.0%	2.9%	1.6%
Total	64.3%	16.9%	14.2%	3.2%	1.4%

- All descriptors assessed most student assessments at a Level 4

Cultural and Global Engagement

Definition

Cultural and Global Engagement: Global Learning encompasses knowledge, skills, and attitudes students acquire through a variety of experiences that enable them to understand world cultures, analyze global systems, appreciate cultural differences, and apply this knowledge and appreciation to their lives as educated individuals and global citizens.

Descriptors

1. KNOWLEDGE: Analyzes
cultural systems, events, or creations and their relationship to worldviews, values, or behavior.

2. INFLUENCES: Evaluates the impact of contemporary and past events, perspectives, or cultures on intercultural relationships.
3. SELF AWARENESS: Analyzes the impact of culture
and intercultural experiences on one's worldview, values and behavior, including assumptions, biases, prejudices, or stereotypes.
4. RESPONSIBILITY: Evaluates the impact of one's moral and ethical reasoning on one's actions in relation to culturally different groups.
5. CULTURAL EXPRESSION: Generates ideas, creations, or models that express the human condition and one's relationship with the world

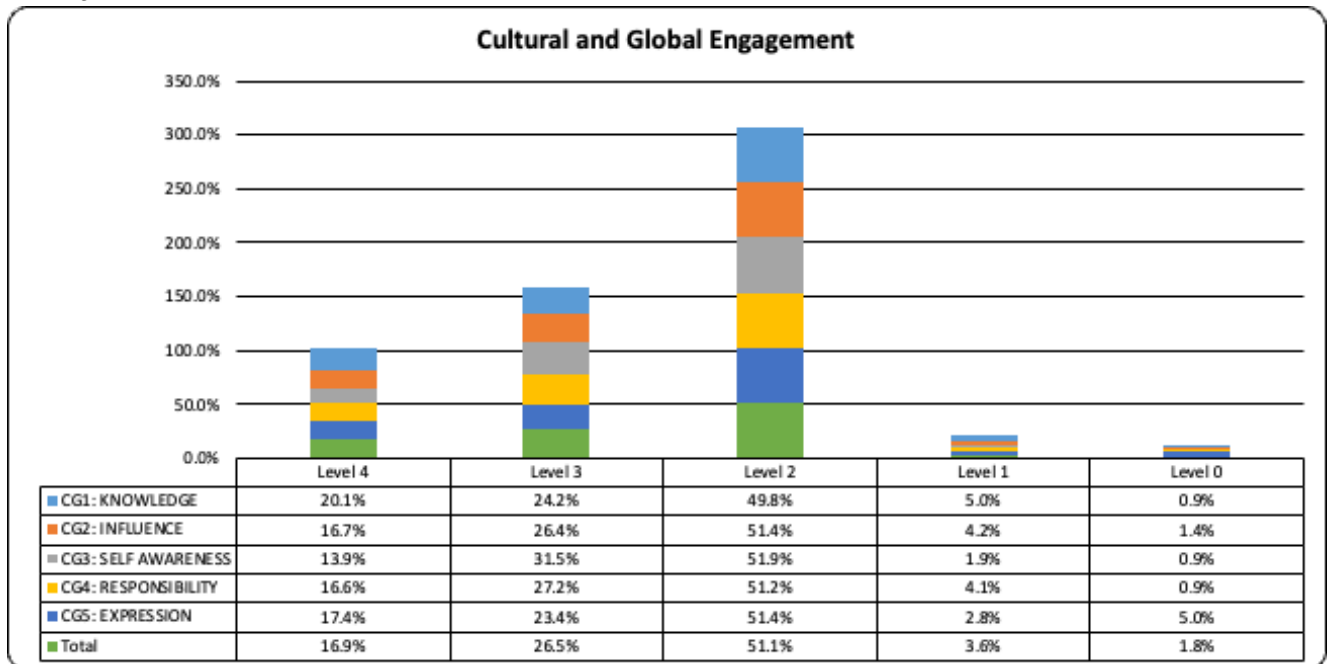**Cultural and Global Engagement Results**
Table 12 shows the college-wide Cultural and Global Engagement learning outcome score for AY 2022-2023. In calculating the average score, blanks were given a score of zero. Therefore, the average score is on a scale of 0 to 4, with four being the highest level of achievement.

Table 12

AY 2022-2023 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Cultural and Global Engagement	203	222	2.47

Chart 5 shows the percentage of students scoring at each Level per descriptor.

Chart 5

Cultural and Global Engagement	Level 4	Level 3	Level 2	Level 1	Level 0
CG1: KNOWLEDGE	20.1%	24.2%	49.8%	5.0%	0.9%
CG2: INFLUENCE	16.7%	26.4%	51.4%	4.2%	1.4%
CG3: SELF AWARENESS	13.9%	31.5%	51.9%	1.9%	0.9%
CG4: RESPONSIBILITY	16.6%	27.2%	51.2%	4.1%	0.9%
CG5: EXPRESSION	17.4%	23.4%	51.4%	2.8%	5.0%
Total	16.9%	26.5%	51.1%	3.6%	1.8%

- All descriptors assessed most student assessments at a Level 2

VI. Indirect Measures of Student Learning

In addition to the direct measures of the achievement of student learning provided by evaluating the results of the assessments administered to students annually, several indirect measures of student learning are collected at the college. These indirect measures provide further evidence of student learning; results from several indirect measures are presented in this section.

Course Completion

Data about course completion is provided for Fall semesters in Table 13. The percentages of successful/unsuccessful students completing a course and those withdrawing from a course have remained relatively stable.

Table 13

Mesa Community College - Course Completion				
	Successful (A, B, C, P)	**Unsuccessful (D, F, Z)**	**Completer Sub-total**	**Withdrew (W,Y)**
Fall 2013	72%	10%	82%	18%
Fall 2014	73%	10%	83%	17%
Fall 2015	74%	10%	84%	16%
Fall 2016	74%	10%	84%	16%
Fall 2017	76%	9%	85%	15%
Fall 2018	76%	9%	85%	15%
Fall 2019	74.5%	9.1%	84%	16.5%
Fall 2020	72%	8.8%	81%	19%
Fall 2021	72%	9.3%	81.3%	18.7%
Fall 2022	74.7%	9.2%	83.9%	16.1%

Term to Term Retention

Term to term retention (sometimes called persistence) is a measure of how many credit students return to college in the future semesters. Students who graduated/earned an award prior to returning the following semester are excluded from the original cohort and following terms. Below is the Fall 2022 cohort retention rate.
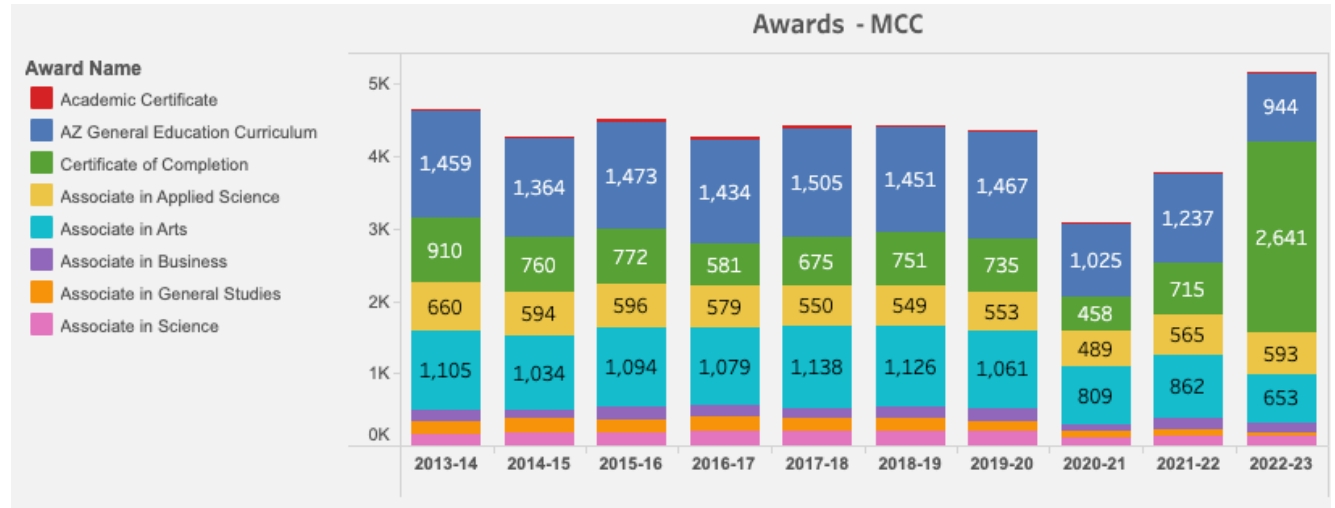
Table 14

	Fall Cohort 2022	Graduates Before Spring	Fall to Spring Retention Rate	Graduates Before Fall	Fall to Fall Retention Rate
All Students	14,047	640	61.9%	1,867	43.7%
Grand Total	14,047	640	61.9%	1,867	43.7%

Degree and Certificate Awards

MCC conferred 1,569 degrees and 3,605 certificates in 2022-23.

Chart 6

Awards - MCC

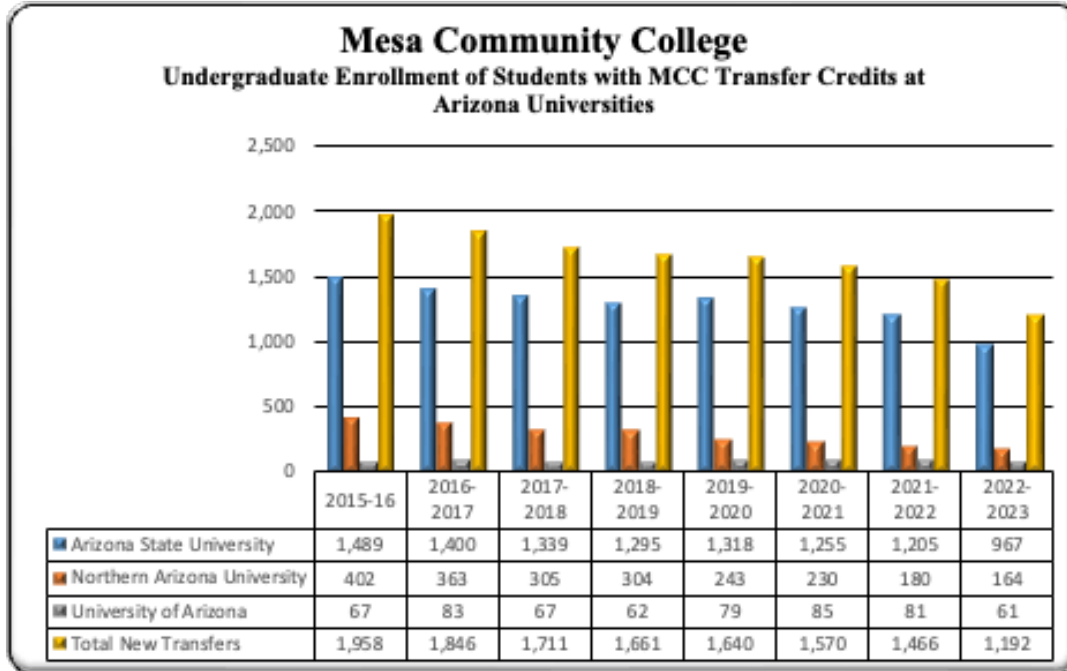Source: MCCCD Office of Institutional Effectiveness – Maricopa Trends

Table 15

Distribution of Awards - MCC

		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Certificat...	Academic Certificate (AC)	0.5%	0.9%	0.9%	0.8%	0.9%	0.5%	0.6%	0.3%	0.6%	0.4%
	AZ General Ed. Curriculum (AGEC)	31.4%	31.9%	32.7%	33.6%	34.0%	32.7%	33.6%	33.2%	32.7%	18.2%
	Certificate of Completion (CCL)	19.6%	17.8%	17.1%	13.6%	15.2%	16.9%	16.9%	14.9%	18.9%	51.0%
Degrees	Asscoiate in Business (AB)	3.2%	2.7%	3.7%	3.7%	3.2%	3.7%	4.2%	3.3%	4.5%	2.8%
	Associate in Applied Science (AAS)	14.2%	13.9%	13.2%	13.6%	12.4%	12.4%	12.7%	15.9%	14.9%	11.5%
	Associate in Arts (AA)	23.8%	24.2%	24.3%	25.3%	25.7%	25.4%	24.3%	26.2%	22.8%	12.6%
	Associate in General Studies (AGS)	4.0%	4.5%	4.0%	4.9%	3.9%	4.0%	3.1%	2.4%	2.1%	1.0%
	Associate in Science (AS)	3.3%	4.2%	4.1%	4.5%	4.6%	4.4%	4.5%	3.9%	3.7%	2.4%

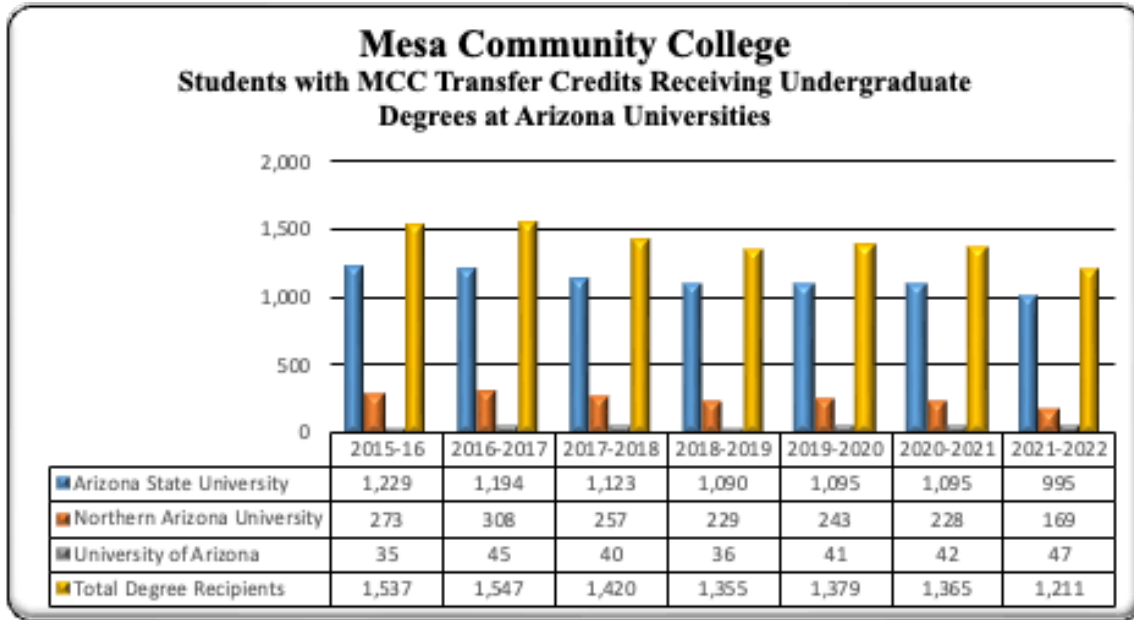Source: MCCCD Office of Institutional Effectiveness – Maricopa Trends

Transfer

The number of students with 12 or more MCC transfer credits enrolled in an Arizona university as new transfers in Fall and Spring semesters and the number of degree recipients with MCC transfer credits are described in the following charts.

Chart 7

Mesa Community College
Undergraduate Enrollment of Students with MCC Transfer Credits at Arizona Universities

	2015-16	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Arizona State University	1,489	1,400	1,339	1,295	1,318	1,255	1,205	967
Northern Arizona University	402	363	305	304	243	230	180	164
University of Arizona	67	83	67	62	79	85	81	61
Total New Transfers	1,958	1,846	1,711	1,661	1,640	1,570	1,466	1,192

Source: Assist Data Warehouse

Chart 8

Mesa Community College
Students with MCC Transfer Credits Receiving Undergraduate
Degrees at Arizona Universities

|	2015-16	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Arizona State University	1,229	1,194	1,123	1,090	1,095	1,095	995
Northern Arizona University	273	308	257	229	243	228	169
University of Arizona	35	45	40	36	41	42	47
Total Degree Recipients	1,537	1,547	1,420	1,355	1,379	1,365	1,211

Source: Assist Data Warehouse

College-Level Course Completion in the First Year

The college-ready rates, completion of math and English in the first year, success rate in the first year trends are shown in the charts below.
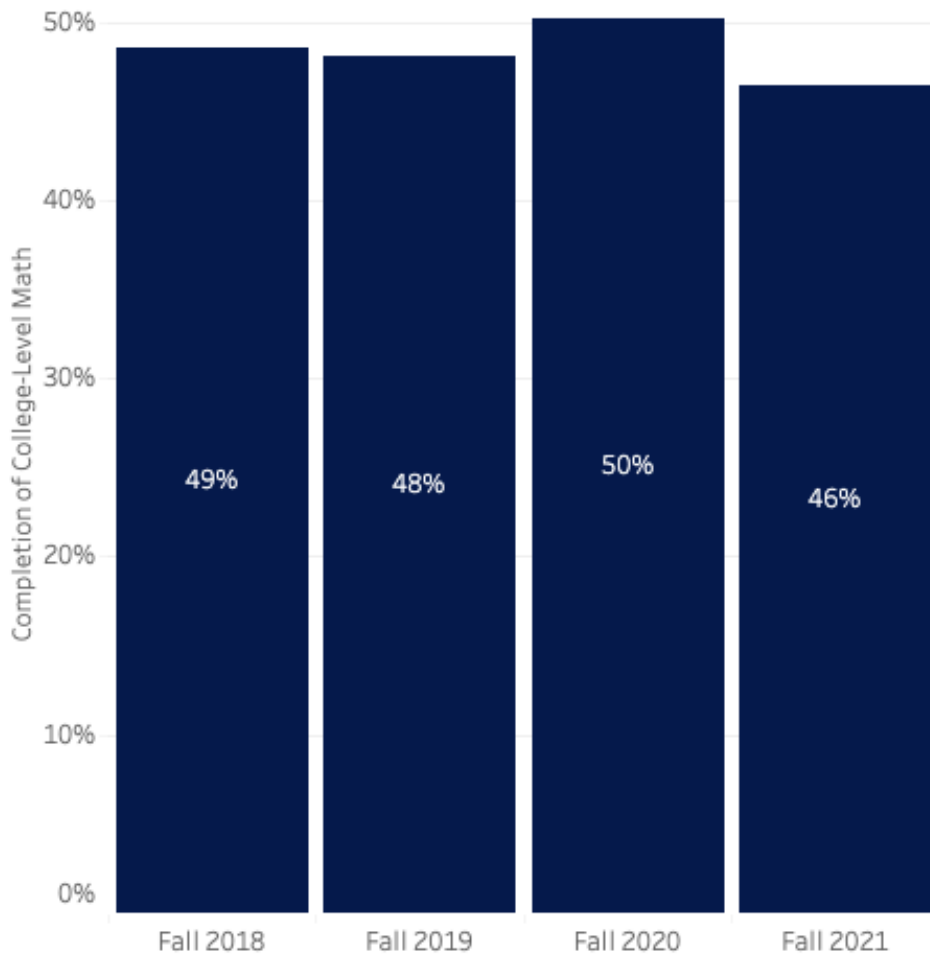
Chart 9

College-Ready Trend
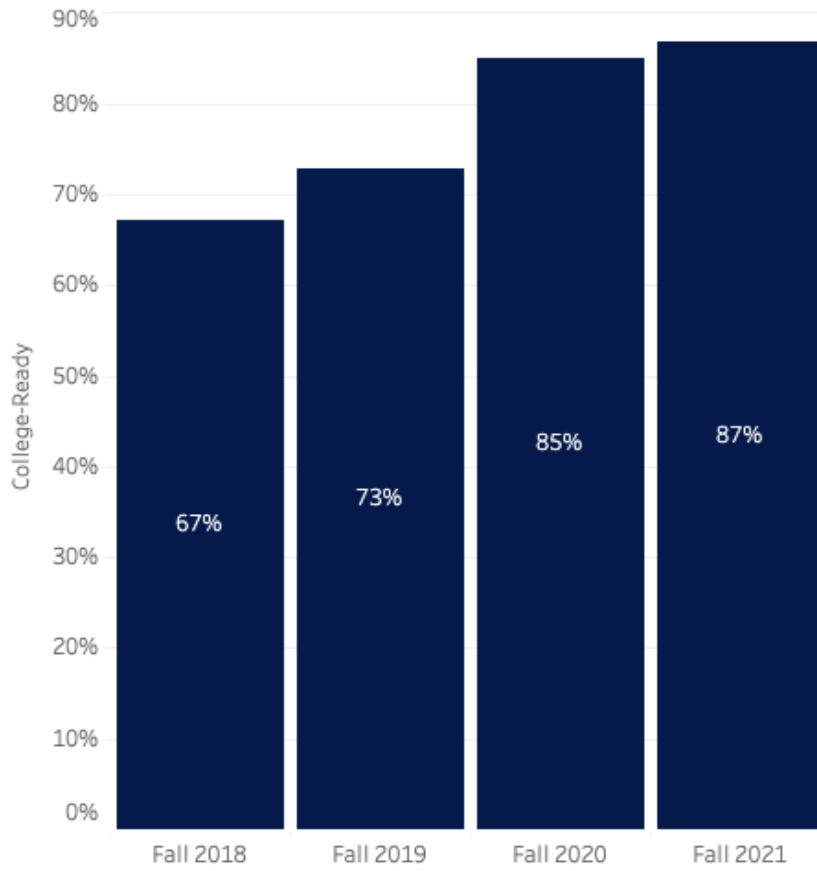
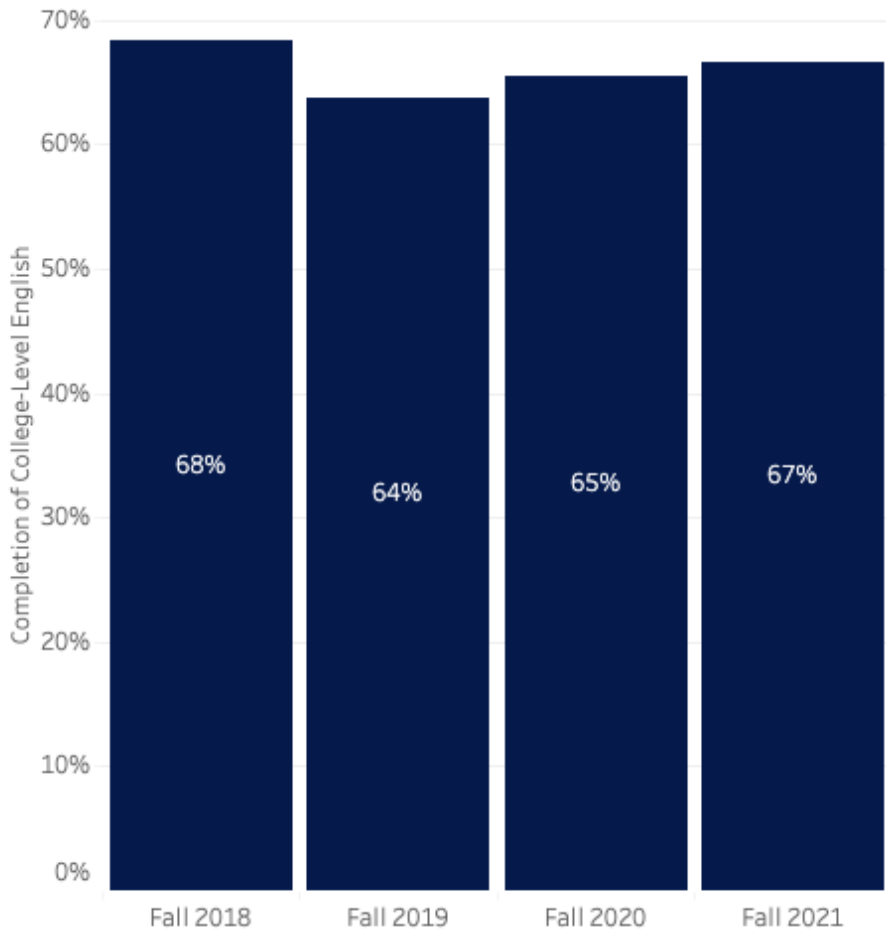Source: MCCCD Student Outcomes Tableau Dashboard – College-Ready

Chart 10

Completion of College-Level Math Trend

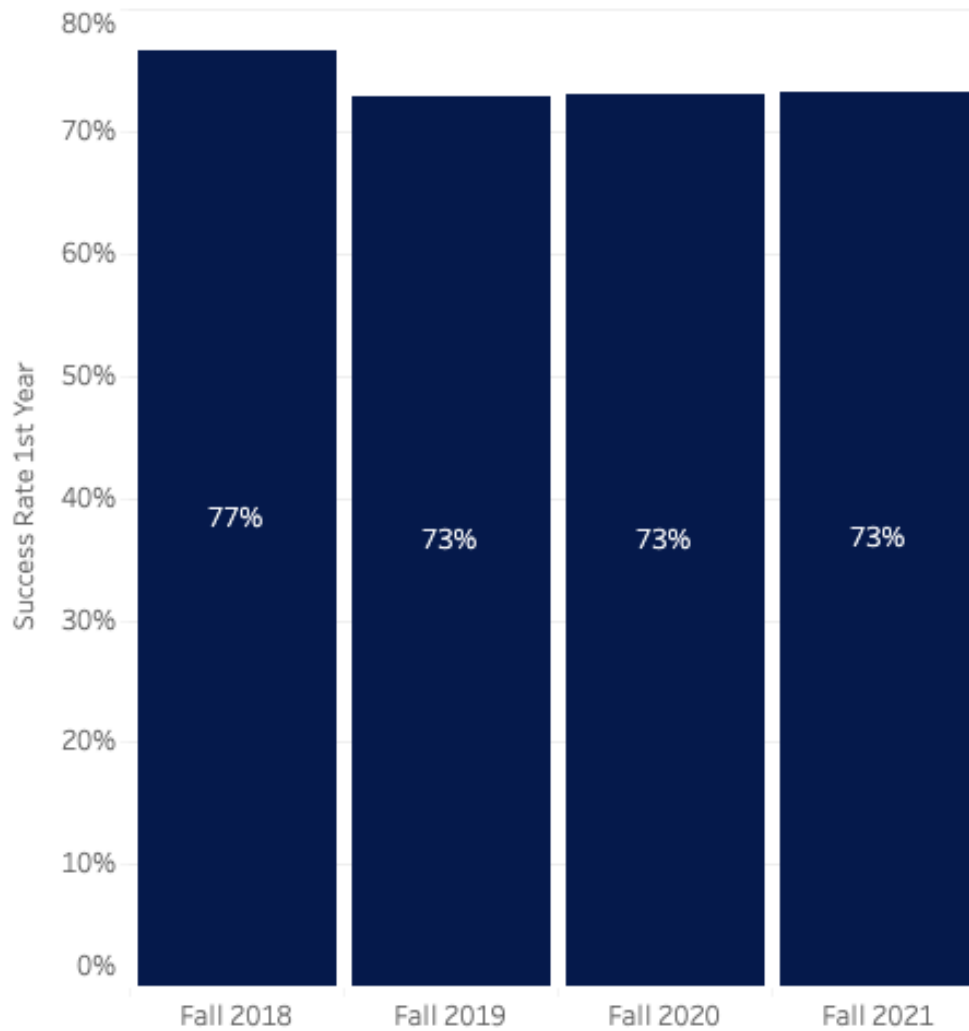Source: MCCCD Student Outcomes Tableau Dashboard – Completion of College-Level Math

Chart 11

Completion of College-Level English Trend

Source: MCCCD Student Outcomes Tableau Dashboard – Completion of College-Level English

Chart 12

Success Rate 1st Year Trend

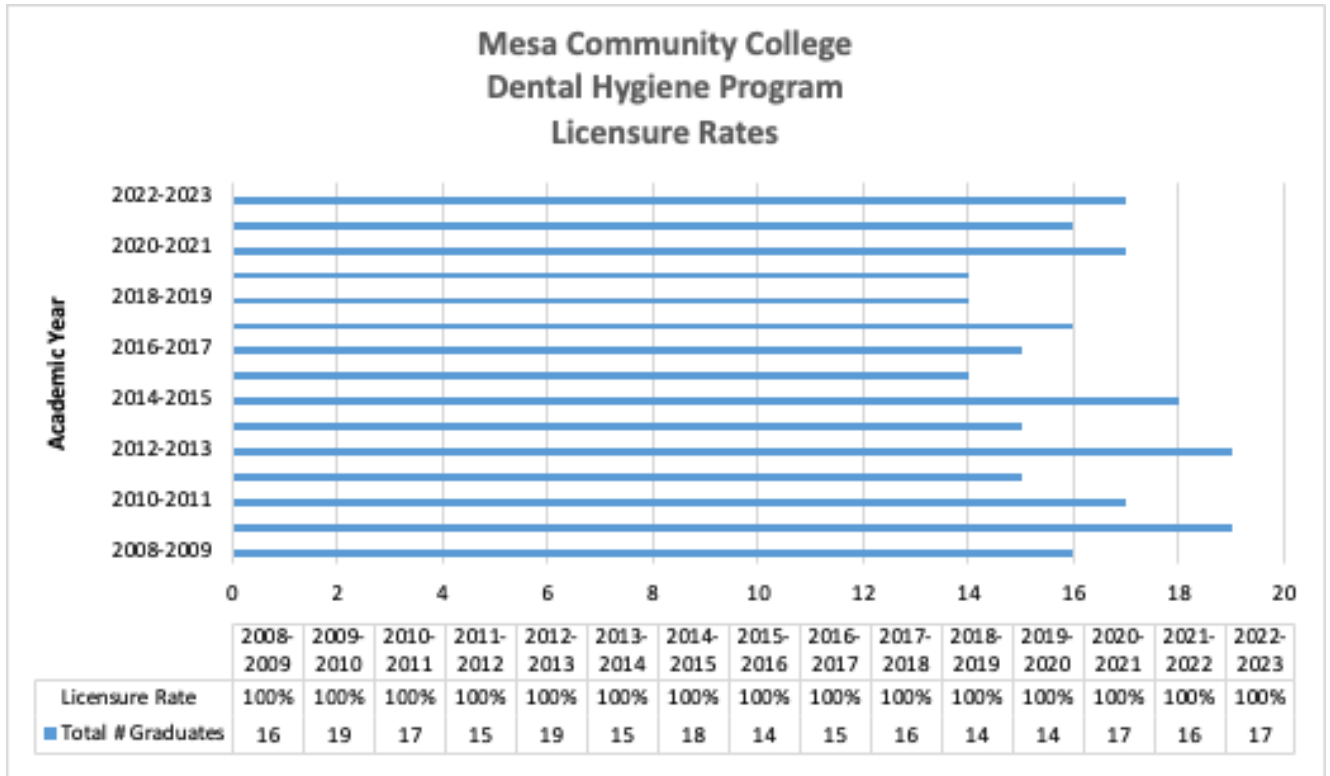Source: MCCCD Student Outcomes Tableau Dashboard – Success Rate 1st Year

Licensure and Certification

Students in Dental Hygiene, Emergency Medical Technology, Fire Science, Nursing, Paramedicine, Veterinary Technology, and Welding programs are able to receive licensure from outside licensure bodies after their studies at MCC. Data on licensure is presented below for these programs.

<u>Dental Hygiene</u>
Dental hygiene students take a national written exam, a regional practical and written exam, and a state written jurisprudence exam. Students must pass all exams in order to obtain a license to practice. Results are obtained from the national and regional examining bodies.

Chart 13

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Licensure Rate	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total # Graduates	16	19	17	15	19	15	18	14	15	16	14	14	17	16	17

Emergency Medical Technology

The Emergency Medical Technology (EMT) program offer students the first steps toward a career as a firefighter or licensed emergency medical technician. Students will be eligible to sit for the EMT certification examination.

Table 16

Mesa Community College - Allied Health Paramedicine /EMT Passage Rates 2019-2024									
	Spring/Summer 2019			Spring/Summer 2020			Spring/Summer 2021		
License/Certification	Attempt	Passed	%	Attempt	Passed	%	Attempt	Passed	%
Cardiopulmonary Resuscitation (EMT 101)	270	270	100%	96	90	94%	199	196	98%
EMT (EMT 104: 3 attempts are allowed)	231	203	88%	76	64	84%	172	150	87%
Paramedic PME 254: 3 attempts are allowed)	42	41	98%	20	19	95%	27	26	96%

Table 17

Mesa Community College - Allied Health Paramedicine /EMT Passage Rates						
	Spring/Summer 2022			Spring/Summer 2023		
License/Certification	Attempt	Passed	%	Attempt	Passed	%
Cardiopulmonary Resuscitation (EMT 101)	190	190	100%			
EMT (EMT 104: 3 attempts are allowed)	152	131	86%%	288	254	88%
Paramedic PME 254: 3 attempts are allowed)	38	37	97%	39	37	95%

Fire Science

The MCC Fire Science program offers certification in several areas as detailed in Table 18 (last updated 2018). The Fire Fighter I and II Certification and the Hazardous Materials First Responder are both granted by the Arizona State Fire Marshall's Office.

Table 18

Mesa Community College - Fire Science/EMT Passage Rates									
License/Certification	Spring/Summer 2016			Spring/Summer 2017			Spring/Summer 2018		
	Attempt	Passed	%	Attempt	Passed	%	Attempt	Passed	%
Wildland Firefighter (FSC 110)	0	0	0	21	21	100%	47	47	100%
Fire Department Operations (FSC 102)	20	17	85%	19	19	100%	41	41	100%
Hazardous Materials/First Responder (FSC105)	43	36	84%	38	30	79%	137	137	100%
Candidate Physical Ability Test (FSC 130)	25	17	68%	30	18	60%	34	19	56%

Nursing

Nursing students who complete a four-semester curriculum and receive the Associate of Applied Science degree are eligible to take an exam to become licensed through the National Council of State Boards of Nursing Examination for Nursing (NCLEX RN) licensure exam; pass rates are detailed in Table 19 below.

Table 19

Mesa Community College Nursing Program NCLEX RN Examination			
	Total # Graduates	# Graduates Taking NCLEX RN Exam	Pass Rate of Exam Takers
Spring 2014	67	66	100%
Spring 2015	84	83	95%
Spring 2016	83	78	96%
Spring 2017	83	73	95%
Spring 2018	54	52	96%
Spring 2019	78	77	99%
Spring 2020	81	80	99%
Spring 2021	74	68	92%
Spring 2022	62	60	97%
Spring 2023	71	71	100%

Paramedicine

A paramedic impacts the lives of people in an emergency. The paramedicine program is nationally-accredited and includes studies in anatomy, physiology, pathophysiology, and cardiology, to name a few.

Table 20

Year	Pass on 1st Attempt		Cumulative Pass Within 3 Attempts		Cumulative Pass Within 6 Attempts	
2022	25 / 28	89%	26 / 28	93%		
2021	24 / 28	86%	26 / 28	93%	26 / 28	93%
2020	36 / 37	97%	36 / 37	97%	36 / 37	97%
2019	42 / 45	93%	44 / 45	98%	44 / 45	98%
2018	23 / 23	100%	23 / 23	100%	23 / 23	100%
2017	17 / 20	85%	20 / 20	100%	20 / 20	100%
2016	23 / 23	100%	23 / 23	100%	23 / 23	100%
2015	24 / 25	96%	24 / 25	96%	24 / 25	96%
2014	21 / 22	95%	22 / 22	100%	22 / 22	100%
2013	18 / 22	82%	19 / 22	86%	20 / 22	91%
2012	*No Program Offered					
2011	25 / 28	89%	26 / 28	93%	26 / 28	93%
2010	22 / 29	76%	26 / 29	90%	26 / 29	90%
2009	20 / 20	100%	20 / 20	100%	20 / 20	100%
2008	19 / 21	90%	21 / 21	100%	21 / 21	100%
2007	30 / 30	100%	30 / 30	100%	30 / 30	100%

<u>Veterinary Technology</u>

Graduates of the MCC Veterinary Technology Program are required to complete two semesters of prerequisite coursework in order to qualify to formally apply for admission to the Program proper. After a selective admission process, the Program proper consists of a five-semester curriculum leading to the Associate of Applied Science in Veterinary Technology/Animal Health. Graduates are immediately eligible to "sit" for the Veterinary Technician National Examination (VTNE) and the Arizona state Veterinary Technician certification examination. The VTNE is administered by the Professional Examination Service, and the state certification examination is administered by the Arizona State Veterinary Medical Examining Board. Upon passing both the VTNE and the state certification examination, the successful candidate is granted certification as a Certified Veterinary Technician by the state of Arizona.
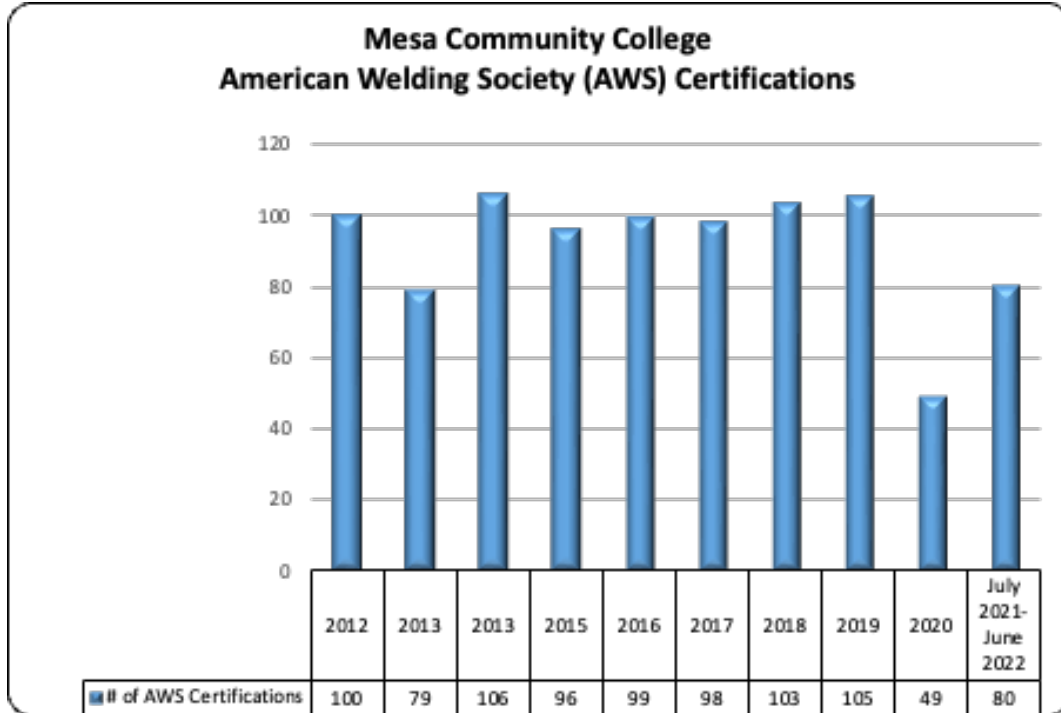
Table 21

	Mesa Community College **Veterinary Technology Board Exam Pass Rates**		
	Graduates	**% Passed State Exam**	**% Passed National Exam**
Spring 2014	13	85%	85%
Spring 2015	15	93%	93%
Spring 2016	10	100%	100%
Spring 2017	10 (6 sat for boards)	100%	100%
Spring 2018	11	N/A	100%
Spring 2019	18	N/A	71%
Spring 2020	10	N/A	100%
Spring 2021	15	N/A	89.9%
Spring 2022	9 (8 sat for boards)	N/A	88%
Spring 2023	13 (8 sat for boards)	N/A	88%

Welding

Welding students who are on the path to gain a Certificate of Completion (CCL) in Welding develop skills in oxyacetylene (gas) and electric (arc) welding. The CCL in Welding has an emphasis on preparing students for the American Welding Society Arc certification exam.

The number of MCC students receiving the AWS Welding Certifications since 2012 are shown in Chart 14.

Chart 14

Mesa Community College
American Welding Society (AWS) Certifications

	2012	2013	2013	2015	2016	2017	2018	2019	2020	July 2021-June 2022
# of AWS Certifications	100	79	106	96	99	98	103	105	49	80

Industry welding certifications students received include: SMAW Plate, FCAW Plate, GMAW Plate, GTAW Aluminum Sheet, GTAW Stainless Steel Sheet, GTAW Carbon Steel Sheet and GTAW/SMAW Pipe Certifications

Appendix A

MCC's 4Cs Scoring Guidelines

Scoring Guidelines

Civic Engagement Scoring Guidelines

	CIVIC ENGAGEMENT - SCORING GUIDELINES				
DEFINITION: Civic engagement encompasses actions to promote the quality of life in a community, through both political and non-political processes.					
Descriptors	**Level 4**	**Level 3**	**Level 2**	**Level 1**	**Level 0**
	Proficient: Demonstrates in-depth understanding of the process or concept. Minor errors or mistakes may be present but do not impede understanding.	**Developing Proficiency:** Demonstrates foundational understanding of the process or concept, but misconceptions impede in-depth understanding.	**Beginning Proficiency:** Demonstrates beginning understanding of the process or concept.	**Not Proficient:** Does not demonstrate understanding.	No submission
1. INCLUSIVENESS: Demonstrate an ability to engage respectfully with others in a diverse society					
2. APPLY KNOWLEDGE: Apply knowledge from one's own study and experiences to active and ethical participation in civic life					
3. DEMONSTRATION OF CIVIC IDENTITY AND COMMITMENT: Provide evidence of experience in and reflection on civic engagement activities					
4. CIVIC COMMUNICATION: Communicate and listen to others in order to establish personal and professional relationships to further civic action					
5. ENGAGEMENT IN CIVIC ACTION AND REFLECTION: Demonstrate the ability to deliberate and collaborate on issues and problems to achieve a civic aim					

Communication Scoring Guidelines

COMMUNICATION - SCORING GUIDELINE					
DEFINITION: The purposeful development, expression and reception of a message through oral, written or nonverbal means.					
Descriptors	**Level 4**	**Level 3**	**Level 2**	**Level 1**	**Level 0**
	Proficient: Demonstrates in-depth understanding of the process or concept. Minor errors or mistakes may be present but do not impede understanding.	**Developing Proficiency:** Demonstrates foundational understanding of the process or concept, but misconceptions impede in-depth understanding.	**Beginning Proficiency:** Demonstrates beginning understanding of the process or concept.	**Not Proficient:** Does not demonstrate understanding.	No submission
1. PURPOSE: Establish a clear central focus for a message which demonstrates an understanding of context, audience, and task					
2. CONTENT: Develop appropriate, relevant content logically sequencing ideas and/or information					
3. LANGUAGE: Apply language and/or modes of expression of a discipline in an appropriate and accurate manner to demonstrate comprehension					
4. EXECUTION: Convey a message effectively					

Critical Thinking Scoring Guidelines

CRITICAL THINKING - SCORING GUIDELINES					
DEFINITION: Habit of mind of analyzing issues, ideas, artifacts, events, and/or evidence to draw conclusions or solve problems.					
Descriptors	**Level 4**	**Level 3**	**Level 2**	**Level 1**	**Level 0**
	Proficient: Demonstrates in-depth understanding of the process or concept. Minor errors or mistakes may be present but do not impede understanding.	**Developing Proficiency:** Demonstrates foundational understanding of the process or concept, but misconceptions impede in-depth understanding.	**Beginning Proficiency:** Demonstrates beginning understanding of the process or concept.	**Not Proficient:** Does not demonstrate understanding.	No submission
1. Identify the topic/ subject of inquiry					
2. Select appropriate resources required to draw conclusion(s) or solve the problem					
3. Apply resources to draw conclusion(s) or solve the problem					
4. Evaluate conclusion(s) or the solution to the problem					

Cultural and Global Engagement Scoring Guidelines

CULTURAL AND GLOBAL ENGAGEMENT - SCORING GUIDELINE					
DEFINITION: Global Learning encompasses knowledge, skills, and attitudes students acquire through a variety of experiences that enable them to understand world cultures, analyze global systems, appreciate cultural differences, and apply this knowledge and appreciation to their lives as educated individuals and global citizens.					
Descriptors	**Level 4**	**Level 3**	**Level 2**	**Level 1**	**Level 0**
	Proficient: Demonstrates in-depth understanding of the process or concept. Minor errors or mistakes may be present but do not impede understanding.	**Developing Proficiency:** Demonstrates foundational understanding of the process or concept, but misconceptions impede in-depth understanding.	**Beginning Proficiency:** Demonstrates beginning understanding of the process or concept.	**Not Proficient:** Does not demonstrate understanding.	No submission
1. KNOWLEDGE: Analyzes cultural systems, events, or creations and their relationship to worldviews, values, or behavior.					
2. INFLUENCE: Evaluates the impact of contemporary and past events, perspectives, or cultures on intercultural relationships.					
3. SELF AWARENESS: Analyzes the impact of culture and intercultural experiences on one's worldview, values and behavior, including assumptions, biases, prejudices, or stereotypes.					
4. RESPONSIBILITY: Evaluates the impact of one's moral and ethical reasoning on one's actions in relation to culturally different groups.					
5. EXPRESSION: Generates ideas, creations, or models that express the human condition and one's relationship with the world					