The Mesa Community College Program to Assess Student Learning

Annual Report AY 2016-2017

Prepared by:
Office of Institutional Effectiveness

November 2017

MESA COMMUNITY COLLEGE

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

AY 2016-2017 Committee Membership

Faculty Senate Student Outcomes Committee

Elizabeth Allen
Matt Ashcraft, Ex-officio (OIE)
Evonne Bowling
Diana Bullen, Chair
Elliott Cherner
Brian Dille
Tim Florschuetz
Paul Harasha
Tawn Hauptli
Rodney Holmes, Ex-officio (VPAA)
Marjorie Leta
Megan McGuire
Annah McMahon
Anna McWhirter
LeeAnna Misterek
Erica Morley
Patrice Nango
Paul Nunez
Duane Oakes
Layne Owens
Bethann Partin
Lindsey Pedersen
Robert Soza
Linda Speranza
Jennifer Strickland
Angie Surber
Lo-An Tabar-Gaul
Ly Tran-Nguyen
Patricia White, Ex-officio (OIE)

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 value, Learning - MCC champions individual student success that reflects the highest academic standards. 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.

Over the past decade, MCC's student learning outcomes were assessed at a college-wide level through Assessment Week. Faculty donated a class session to proctor an exam that gauged student performance on one of ten learning outcomes. The assessment results were divided into pre- and post-groups based on the number of credit hours that students completed at the time the test was taken. Using this methodology, MCC has consistently shown that students who complete a few semesters at MCC perform better on the learning outcomes than students who had completed less than one semester. In 2007, the Council for Higher Education Accreditation (CHEA) recognized MCC for the innovation of the Assessment Week program.

Areas in need of improvement were identified through the Assessment Week program. Internal grant funds were made available to support initiatives to improve teaching and learning in targeted areas. The grant initiatives supported innovative approaches and sparked important conversations. In the Fall of 2012, the conversation of the difficulty of documenting sustainable improvement of student learning and "closing the loop" motivated the revisions to our college Student Learning Outcomes and assessment method.

The Student Outcomes Committee (SOC) is a faculty senate committee. The committee directs activities related to the implementation of MCC's Student Outcomes Assessment program. In the Fall of 2012, SOC created a Student Outcomes Committee Informed Improvement (SOCii) cluster. Informed improvement is an ongoing cycle of researching, planning, taking action, measuring and analyzing the impact, and making changes designed to increase student learning and success. Through the informed improvement project, SOCii used evidence-based decision-making to address the question:

How can the Student Outcomes Committee Informed Improvement Team facilitate the effective integration of general education outcomes assessment throughout all MCC programs and departments? (Fall 2012)

In researching the issue, the team attended several local and national conferences on assessment. Attendance to the conferences raised awareness as to the extent of course level assessment that was taking place across many colleges and institutions. Thus, confirming the need to revise our assessment methodology.

SOC and Faculty Senate approved a revision of the general education outcomes to better focus on student success. MCC's Student Learning Outcomes became MCC's 4Cs: Communication, Civic Engagement, Critical Thinking, and Cultural and Global Engagement, with each outcome having 5 to 6 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.

The transition from the old model of learning outcome assessment to the MCC's 4Cs assessment model allows all students to be assessed regardless of modality. The college will be able to accurately assess the outcomes and "close the loop" of improved instruction by having access to meaningful course, program, and college level performance data.

Organizational Structure for Assessment

The Student Outcomes Committee is composed of 26 faculty from many disciplines, and confers regularly with the Faculty Senate. The Dean of the Office of Institutional Effectiveness (OIE), as well as analysts from the office, serves as a consultant to the committee to ensure that assessment processes and methodologies reflect good practice, including adherence to guidelines for ethical research.

In the past, SOC has run assessment week with substantial participation from full-time and part-time faculty who developed, administered, and scored the assessment instruments. The current revision of our process to assess student learning has continued to engage faculty through regular meetings of the committee, and through the participation of dozens of other academic and occupational faculty in events like a multi-day curriculum mapping processes designed to help tie course competencies in every discipline to the four Institutional Learning Outcomes.

Copy and paste this link into a web browser to access SOC 2016-2017 meeting minutes.
https://www.mesacc.edu/about/office-institutional-effectiveness/student-assessment/student-outcome-committee

SOC Goals and Accomplishments

The MCC Student Outcomes Committee achieved a number of significant accomplishments for the 2013-2014 and 2014-2015 academic years:

Fall 2013-Spring 2014
- "Be a Champion" promotion for increased participation in SOC; the committee doubled in size
- SOC initiated a revision of MCC's Institutional Student Learning Outcomes (ISLOs)
- Scoring Guidelines were created for each learning outcome
- Faculty Senate approved MCC's new ISLOs, MCC's 4Cs in December 2013
- Faculty mapped the ISLOs to curriculum
- SOC Chair and SOC Chair-elect presented at the first AZ Assessment Conference in regards to MCC's 4Cs

Fall 2014-Spring 2015
- College-wide marketing campaign to promote MCC's 4Cs
  - Faculty academic summit which focused on how each 'C' can be assessed through course assignments and activities
  - Adjunct faculty convocation presentation and activity to introduce adjunct faculty to MCC's 4Cs
  - Faculty workshops at Southern and Dobson and Red Mountain campuses addressing each outcome and its criteria
  - Promotional material such as pens and postcards were given out to faculty and staff at MCC
  - MCC's 4Cs banners were posted around Southern and Dobson and Red Mountain campuses
- 12 hour reassign position for an Assessment Coordinator was approved by faculty senate and administration; position became effective January 2015
- 7 Assessment Coaches selected to promote and educate on the MCC's 4Cs were established
- MCC's 4Cs pilot started in Spring 2015
- "Lunch and Learn" event to walk faculty through the process of preparing their Canvas course for MCC's 4Cs assessment pilot
- Assessment Coordinator and Assessment Coaches educated MCC's 4Cs assessment pilot volunteers on the new assessment process and assisted faculty in preparing their courses for the pilot
- Pilot ended the 15th of May 2015 – faulty provided feedback

Fall 2015-Spring 2016
- Fall 2015 faculty summit on assessment
- Workshops and trainings conducted to educate and assist all faculty with MCC's 4Cs
- MCC's 4Cs assessment pilot results provided as well as feedback from online faculty survey
- Training on MCC's 4Cs and new assessment method included in New Faculty Orientation
- Collaborated with Guided Pathway to Success (GPS) curriculum mapping teams to develop program-level student learning outcomes and to align program courses with MCC's 4Cs
  - GPS is a framework that will help students identify their goals and needs, and chart clear routes to timely completion.
- Academic Summit workshops on assessment

Fall 2016-Spring 2017
- Host for 4th Arizona Assessment Conference and multiple speakers on assessment, academic freedom and responsibility, and curriculum mapping
- Ongoing professional development workshops in the Center for Teaching and Learning (CTL) and outreach to departments to assist with course-level assessment planning and implementation
- Ongoing Guided Pathways collaboration for aligning MCC's 4Cs with learning outcomes at the course and program level
- MCC's 4Cs Academic Showcase and faculty recognition awards to highlight assessment and student learning

SOC Goals
SOC will continue to build a culture of assessment around MCC's 4Cs across curriculum and in co-curricular programs and activities. Some of the SOC goals are as follows:

- SOC will work to increase faculty participation in integration of MCC's 4Cs into curriculum
  - Use the initial course mapping activity, determine a baseline level of integration of MCC's 4Cs into all courses offered at MCC and increase each year until all courses have integrated the outcomes
- SOC will work to increase faculty participation in assessing MCC's 4Cs at the course level
  - Determine faculty participation rate in MCC's 4Cs Assessment Pilot conducted in Spring 2015 and double the participation rate each year for the following four years
- SOC will begin working with department chairs and managers to ensure that MCC's 4Cs is a documented department initiative in every department plan
- SOC will begin work to identify all co-curricular programs and activities and assist with the integration and assessment of MCC's 4Cs; having all co-curricular programs and activities integrated and assessing by 2018
- SOC will collaborate with the CTL and the Informed Improvement Coordinator to assist departments with using assessment data to improve student learning at the course and program level.

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 born: 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 the MCC's 4Cs were born after unanimous approval from Faculty Senate. SOCii process chart shown below:
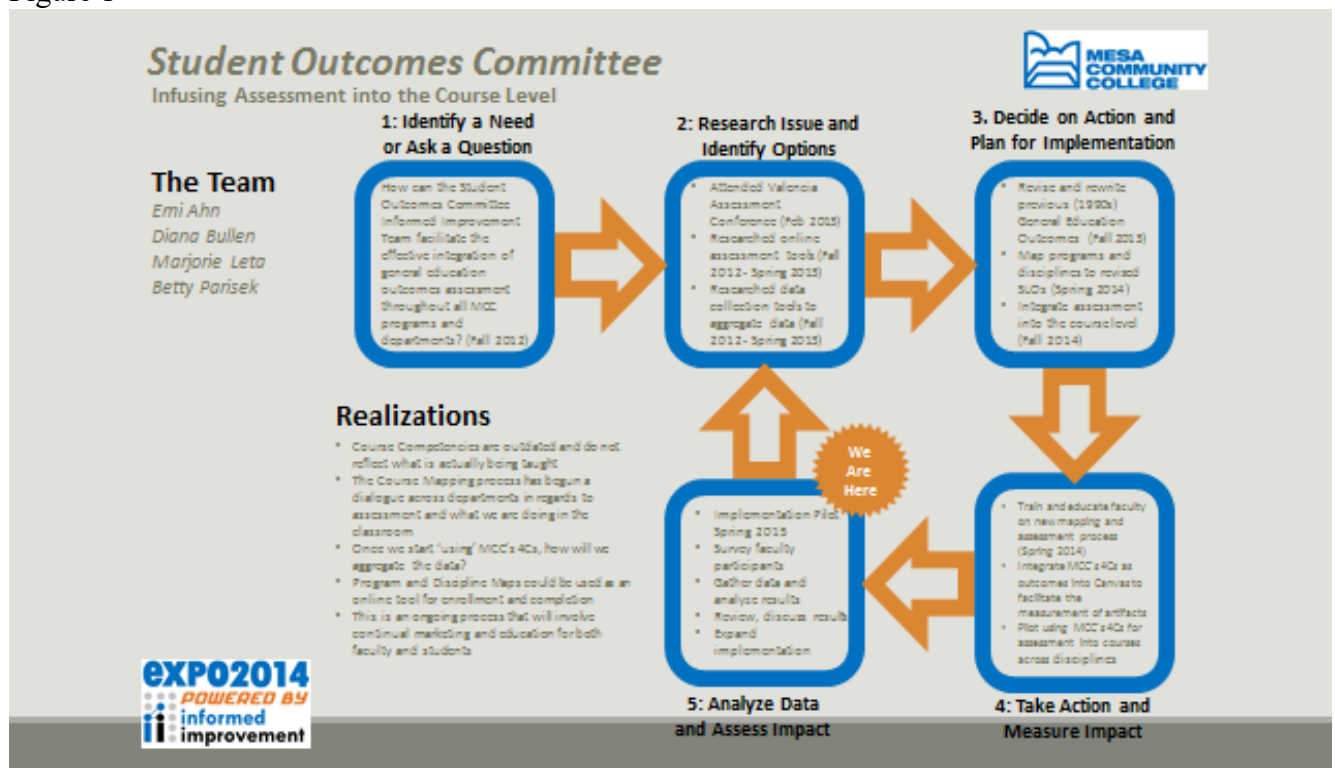
Figure 1

Figure 2

Mesa Community College: Institutional Student Learning Outcomes
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)	**CIVIC ENGAGEMENT (CE)**
Institutional Learning Outcome: Purposeful development, expression, or reception of a message through oral, written, or non-verbal 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 information. **3. LANGUAGE:** Apply language of a discipline in an appropriate and accurate manner to demonstrate comprehension. **4. EXECUTION:** Convey a message effectively. **5. RECEPTION:** Utilize appropriate oral, written, or non-verbal means to receive or interpret a message effectively**.**	**Institutional learning Outcome:** 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. APPLICATION OF KNOWLEDGE –** Apply the 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)	**CULTURAL AND GLOBAL ENGAGEMENT (CG)**
Institutional Learning Outcome: The mental process of effectively identifying, determining, gathering, evaluating, and utilizing resources to innovate and/or to accomplish a specific task. **1. IDENTIFY ISSUE:** Identify and interpret a problem or issue. **2. DETERMINE NEEDS:** Determine the resources needed. **3. GATHER RESOURCES:** Gather resources effectively and efficiently. **4. EVALUATE RESOURCES:** Evaluate resources critically. **5. UTILIZE RESOURCES:** Utilize resources effectively and creatively to innovate and/or to accomplish a specific task. **6. ASSESS RESULTS:** Assess and evaluate results. MARICOPA COMMUNITY COLLEGES / MESA COMMUNITY COLLEGE *Red Mountain* 5 December 2013	**Institutional learning Outcome:** Encompasses the awareness of cultural systems, events, and creations and an ability to apply this cultural and global awareness to human interaction and expression. **1. CULTURAL KNOWLEDGE**: Identify cultural systems, events, or creations. **2. GLOBAL INFLUENCES:** Identify the global forces that shape culture and subculture. **3. CULTURAL AND GLOBAL SELF AWARENESS**: Analyze and explain the impact of culture and experience on one's worldview and behavior, including stereotypes, assumptions, biases, and prejudices. **4. CULTURAL AND GLOBAL AWARENESS**: Analyze and explain the impact of historical events, perspectives, or cultures on world societies, human interaction and expression, and the natural environment. **5. INCLUSIVENESS:** Demonstrate a willingness and ability to engage with other cultures and global societies. **6. CULTURAL EXPRESSION:** Generate ideas, creations, or models that express the human condition and our relationship with the world around us.

Institutional Student Learning Outcomes Mapping Activity
SOC led the Academic Summit during the Spring 2014 semester. The summit engaged faculty from across both campuses and all disciplines and programs. Workshops were carried out for 2 days during accountability week and 100 faculty participated. All academic areas and all CTE departments with the exception of one were represented. The workshops allowed faculty to review their courses, and map their programs to the new Institutional Student Learning Outcomes (iSLOs).

Figure 3
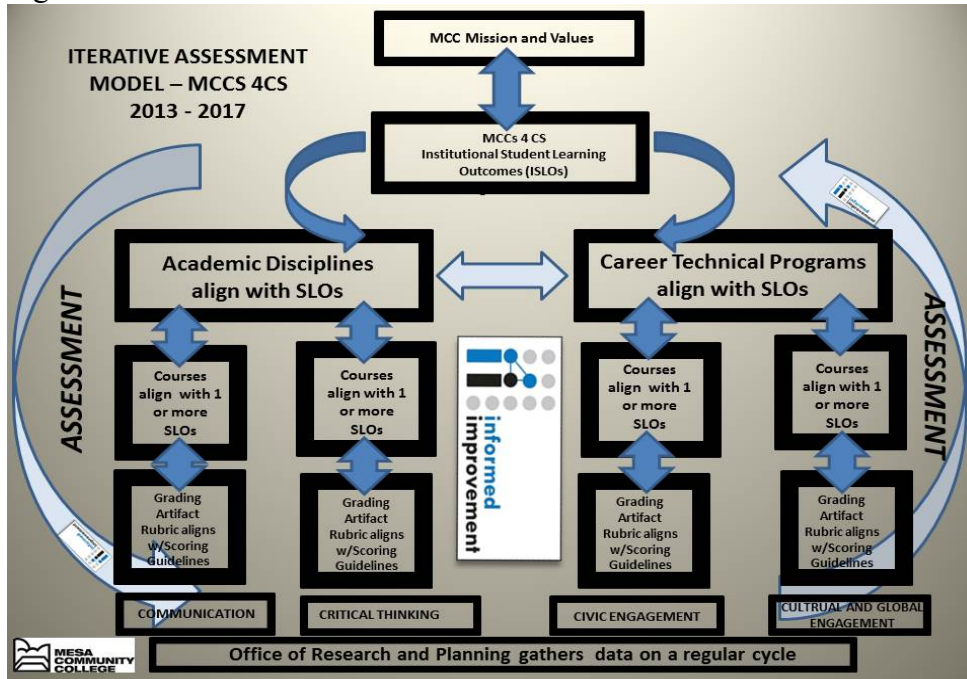
III. Methodology

During the semesters of Fall 2016 and Spring 2017 (Fall 2016-Spring 2017), SOC invited all residential, one year only, one semester only, and adjunct faculty to participate in MCC's 4Cs assessment. To assist with promoting participation in assessment activities, lead faculty through the assessment process, and provide guidance in the creation of a signature assignment aligning to the scoring guidelines, SOC sought out and chose Assessment Coaches.

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 achievement levels 1 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 IBM SPSS Statistics.

During the analysis phase, if a student's outcome score was blank, a zero score was given. 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.

Data Collection Procedures

SOC focused assessment efforts on the four outcome areas: Civic Engagement, Communication, Critical Thinking, and Cultural and Global Engagement.

SOC members and Assessment Coaches recruited faculty volunteers. Flyers, informational sessions and trainings, intranet postings, and posters were provided to help recruit volunteers. One hundred and thirty-eight faculty members volunteered a total of 324 sections at Southern and Dobson, Red Mountain campuses, Online and one HS Dual during Fall 2016-Spring 2017. Faculty administered all assessments in regular class sessions during each semester.

Using Canvas, faculty participation was tracked throughout both Fall and Spring semesters by checking if the instructor attached Scoring Guidelines to at least one of their courses. Either the SOC chair or an Assessment Coach notified faculty whom said they would participate, but had not attached Scoring Guidelines by the end of the 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 each semester. 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 was used to match each student's assessment with exact demographic and course data using IRIS.

Student Profile of MCC's 4Cs Fall 2016-Spring 2017

Table 1

Student Profile of Fall 2016 - Spring 2017 Assessments and College		
	Fall 2016-Spring 2017 Assessment	**Total College (Fall 2016 45th day)**
Headcount (Unduplicated)	4,576	20,508
Ethnicity		
Am. Indian/Alaska Native	3.2%	3.7%
Asian	7.7%	6.0%
Black/African American	6.2%	6.2%
Hispanic/Latino	26.3%	25.4%
Not Specified	9.4%	9.9%
White	47.2%	48.8%
Gender		
Female	57.6%	49.4%
Male	41.0%	49.0%
Other/Unknown	1.5%	1.6%
Age Group		
15-19	26.5%	32.0%
20-24	40.3%	36.2%
25-29	15.2%	14.3%
30-39	11.3%	10.5%
40-49	3.9%	4.0%
50-59	2.3%	2.1%
60+	0.4%	.7%
Undeclared	.1%	0.2%
Primary Time of Attendance		
Day	65.8%	65.1%
Evening	10.4%	13.8%
Non-Traditional	18.9%	19.0%
Weekend	1.3%	2.0%
None/Unknown	3.6%	.1%
Academic Load		
Full Time	51.6%	50.5%
3/4 Time	13.0%	19.7%
Half-Time	19.8%	18.1%
Less than Half-Time	11.5%	11.6%
No Units	4.0%	-

IV. Overall Summary of Results

Faculty Participation

MCC moved to MCC's 4Cs assessment model in Spring 2015 (See Appendix B for the summary of Fall 2015-Spring 2016 assessment results). SOC worked to increase awareness and promote the use of MCC's 4Cs to the college community. The table below shows the number of faculty that volunteered in MCC's 4Cs pilot during Spring 2015, Fall 2015-Spring 2016 and Fall 2016-Spring 2017 participants, as well as, the faculty participation rate.

Table 2

Faculty Participation			
	MCC's 4Cs Spring 2015 Pilot	**Fall 2015-Spring 2016**	**Fall 2016-Spring 2017**
Number of Residential Faculty Participants	33	71	98
Number of Adjunct Faculty Participants	2	31	40
Residential Faculty*	341	323	303
Adjunct Faculty	861	812	598
4Cs Residential Faculty Participation Rate	*9.68%*	*21.98%*	*32.34%*
4Cs Adjunct Faculty Participation Rate	*0.23%*	*3.81%*	*6.69%*

*FY 2016-2017 actively filled faculty positions (Residential and OYO)

Analysis Highlights

- 4,576 students were assessed, completing 6,151 assessments in 134 courses from 17 departments
- 98 residential and 40 adjunct faculty administered the assessments in 324 sections
- 718 students were assessed in Civic Engagement with a college-wide learning outcome average score of 2.92
- 1,989 students were assessed in Communication with a college-wide learning outcome average score of 3.04
- 1,926 students were assessed in Critical Thinking with a college-wide learning outcome average score of 3.05
- 1,069 students were assessed in Cultural and Global Engagement with a college-wide learning outcomes score of 3.0

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

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 are a duplicate count of students. Table 3 provides the departments, the number of instructors, number of courses, number of sections and the number of students assessed Fall 2016-Spring 2017.

Table 3

Fall 2016-Spring 2017- Assessments Administered by Department				
Department	# of Instructors	# of Courses	# of Sections	# of Students
Administration of Justice	6	15	17	161
Applied Sciences and Technology	3	4	4	39
Art	9	11	24	549
Business & Information Systems	18	23	55	668
Communication, Theatre & Film Arts	11	9	30	405
Cultural Science	6	10	14	291
Education Studies	4	5	16	258
English/ Humanities/ Journalism	11	7	18	268
Exercise Science, Physical Education, Recreation, Dance	4	5	9	145
Life Science	4	3	15	514
Mathematics and Computer Science	9	9	25	422
Music	2	2	2	17
Nursing	17	4	14	273
Psychological Science	9	3	9	154
Reading	12	7	39	482
Social Science	6	8	13	193
World Languages	11	9	20	253
Total	**142**	**134**	**324**	**5,092**

Table 4 shows the department, number of courses assessed, number of courses offered (excluding noncredit, cancelled courses, ROTC and NSO) and the percentage of courses assessed in Fall 2016-Spring 2017.

Table 4

Fall 2016-Spring 2017 – Courses Offered and Assessed						
Department	**# of Courses Assessed**	**# of Courses Offered**	**% of Courses Assessed**	**# of Sections Assessed**	**# of Sections Offered**	**% of Sections Assessed**
Administration of Justice	15	44	34.09%	17	147	11.56%
Applied Sciences and Technology	4	237	1.69%	4	546	0.73%
Art	11	49	22.45%	24	189	12.70%
Business & Information Systems	23	254	9.06%	55	916	6.00%
Communication, Theatre & Film Arts	9	32	28.13%	30	246	12.20%
Cultural Science	10	75	13.33%	14	300	4.67%
Education Studies	5	48	10.42%	16	123	13.01%
English/ Humanities/ Journalism	7	77	9.09%	18	694	2.59%
Exercise Science, Physical Education, Recreation, Dance	5	134	3.73%	9	350	2.57%
Life Science	3	25	12.00%	15	422	3.55%
Mathematics and Computer Science	9	37	24.32%	25	593	4.22%
Music	2	248	0.81%	2	597	0.34%
Nursing	4	23	17.39%	14	121	11.57%
Psychological Science	3	22	13.64%	9	247	3.64%
Reading	7	12	58.33%	39	141	27.66%
Social Science	8	33	24.24%	13	187	6.95%
World Languages	9	39	23.08%	20	157	12.74%
Total	**134**	**1,389**	**9.65%**	**324**	**5,976**	**5.42%**

Table 5 shows the number of assessments administered by location and instructional mode.

Table 5

Fall 2016 – Spring 2017 Assessment – College Level Location and Instructional Mode			
Location	**Instructional Mode**	**# of Sections**	**# of Students**
Southern and Dobson	Field Based	1	3
	Hybrid	24	335
	In Person	199	3,270
	S&D Total	**224**	**3,608**
Red Mountain	Hybrid	8	78
	In Person	18	248
	RM Total	**26**	**326**
Online	**Online Total**	**73**	**799**
HS Dual	**HS Dual Total**	**1**	**5**
Total	**-**	**324**	**4,738**

Tables 6 – 9 show the college – wide average of MCC's 4Cs by location.

Table 6

Fall 2016-Spring 2017 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	718	735	**2.92**
Communication	1,989	2,233	**3.04**
Critical Thinking	1,926	2,056	**3.05**
Cultural and Global Engagement	1,069	1,127	**3.00**
Total	**5,702**	**6,151**	**-**

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

Table 7

Fall 2016-Spring 2017 - Assessment – Southern and Dobson			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	386	393	**2.79**
Communication	1,499	1,709	**3.06**
Critical Thinking	1,485	1,559	**3.06**
Cultural and Global Engagement	823	870	**2.92**
Total	**4,193**	**4,531**	**-**

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

Table 8

Fall 2016-Spring 2017 - Assessment – Red Mountain			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	85	85	**3.13**
Communication	177	177	**2.66**
Critical Thinking	108	112	**2.43**
Cultural and Global Engagement	75	75	**3.22**
Total	**445**	**449**	**-**

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

Table 9

Fall 2016-Spring 2017 - Assessment – Online			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	248	257	**3.06**
Communication	327	342	**3.14**
Critical Thinking	344	385	**3.2**
Cultural and Global Engagement	176	182	**3.27**
Total	**1,095**	**1,166**	**-**

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

Table 10

Fall 2016-Spring 2017 - Assessment – MCC HS Dual			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	-	-	-
Communication	5	5	**2.88**
Critical Thinking	-	-	-
Cultural and Global Engagement	-	-	-
Total	**5**	**5**	**-**

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

Civic Engagement

Definition
Civic Engagement: Encompasses actions to promote the quality of life in a community, through both political and non-political processes. See Appendix A for Scoring Guidelines.

Descriptors
1. Inclusiveness: Demonstrate and ability to engage respectfully with others in a diverse society.
2. Application of Knowledge: Apply the 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 Fall 2016-Spring 2017. 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.

Chart 1 shows the percentage of students scoring at each achievement level per descriptor.

Table 11

Fall 2016-Spring 2017 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Civic Engagement	718	735	**2.92**

Chart 1

Civic Engagement

	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1	Blank (0)
CE5: Engagement in Civic Action and Reflection	7.25%	6.65%	4.43%	1.59%	0.21%
CE4: Civic Communication	6.25%	5.73%	5.62%	1.48%	0.29%
CE:3 Demonstration of Civic Identity and Commitment	6.79%	7.96%	5.27%	0.86%	0.13%
CE2: Application of Knowledge	7.34%	6.56%	4.85%	1.07%	0.31%
CE1: Inclusiveness	6.52%	7.36%	4.31%	1.07%	0.13%
Total	34.15%	34.26%	24.48%	6.07%	1.07%

- 68.41% of Civic Engagement assessments were rated at achievement level 4 or achievement level 3
- <u>CE2: Application of Knowledge</u> assessed more students at achievement level 4 (7.34%) than the other descriptors assessing at achievement level 4
- <u>CE3: Demonstration of Civic Identity and Commitment</u> assessed more students at achievement level 3 (7.96%) than the other descriptors assessing at achievement level 3
- <u>CE4: Civic Communication</u> assessed more students at achievement level 2 (5.62%) than the other descriptors assessing at achievement level 2
- <u>CE5: Engagement in Civic Action and Reflection</u> assessed more students at achievement level 1 (1.59%) than the other descriptors assessing at achievement level 1

Communication

Definition
Communication: Purposeful development, expression, or reception of a message through oral, written, or non-verbal 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 information.
3. Language: Apply language of a discipline in an appropriate and accurate manner to demonstrate comprehension.
4. Execution: Convey a message effectively.
5. Reception: Utilize appropriate oral, written, or non-verbal means to receive or interpret a message effectively.
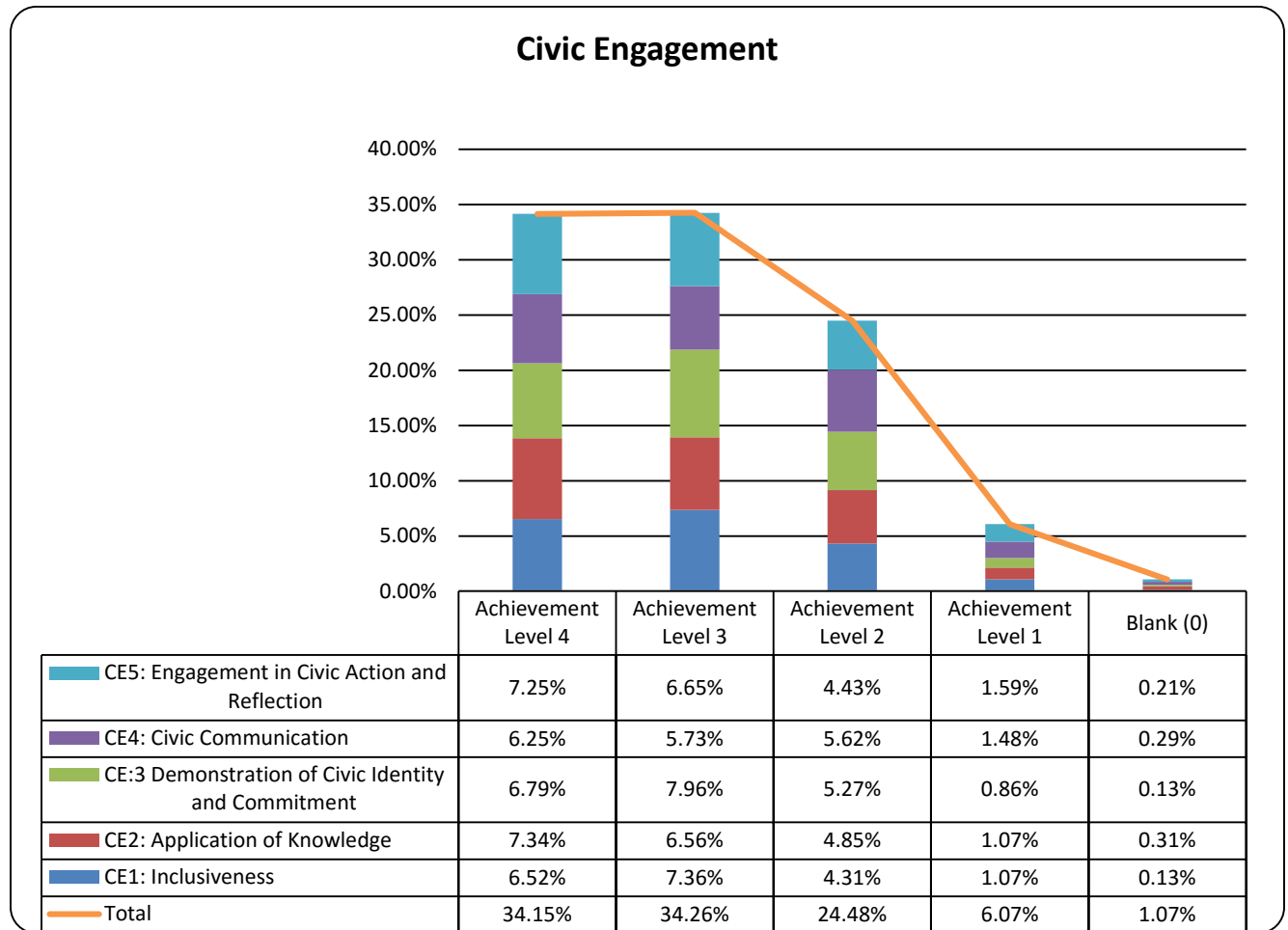
Communication Results
Table 10 shows the college-wide Communication learning outcome score for Fall 2016-Spring 2017. In calculating the average score, blanks were given a score of zero. Therefore, the average score is on a scale of 0 to 4, with four being the highest level of achievement.

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

Table 12

Fall 2016-Spring 2017 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Communication	1,989	2,233	**3.04**

Chart 2

Communication

	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1	Blank (0)
CO5: Reception	8.00%	8.34%	2.32%	1.25%	0.10%
CO4: Execution	7.62%	9.10%	2.08%	1.12%	0.06%
CO3: Language	6.24%	8.01%	4.31%	1.34%	0.08%
CO2: Content	6.28%	9.10%	3.43%	1.14%	0.05%
CO1: Purpose	6.66%	7.88%	4.17%	1.20%	0.08%
Total	34.80%	42.43%	16.31%	6.05%	0.37%

- 42.43% of Communication assessments were rated at achievement level 3
- CO5: Reception assessed more students at achievement level 4 (8.00%) than the other descriptors assessing at achievement level 4
- CO4: Execution and CO2: Content assessed more students at achievement level 3 (9.10%) than the other descriptors assessing at achievement level 3
- CO3: Language assessed more students at achievement level 2 (4.31%) than the other descriptors assessing at achievement level 2
- Less than 2% of students assessed at achievement level 1 for each descriptors

Critical Thinking

Definition
Critical Thinking: The mental process of effectively identifying, determining, gathering, evaluating, and utilizing resources to innovate and/or to accomplish a specific task. See Appendix A for Scoring Guidelines.

Descriptors
1. Identify Issue: Identity and interpret a problem or issue.
2. Determine Needs: Determine resources needed.
3. Gather Resources: Gather resources effectively and efficiently.
4. Evaluate Resources: Evaluate resources critically.
5. Utilize Resources: Utilize resources effectively and creatively to innovate and/or to accomplish a specific task.
6. Assess Results: Assess and evaluate results.
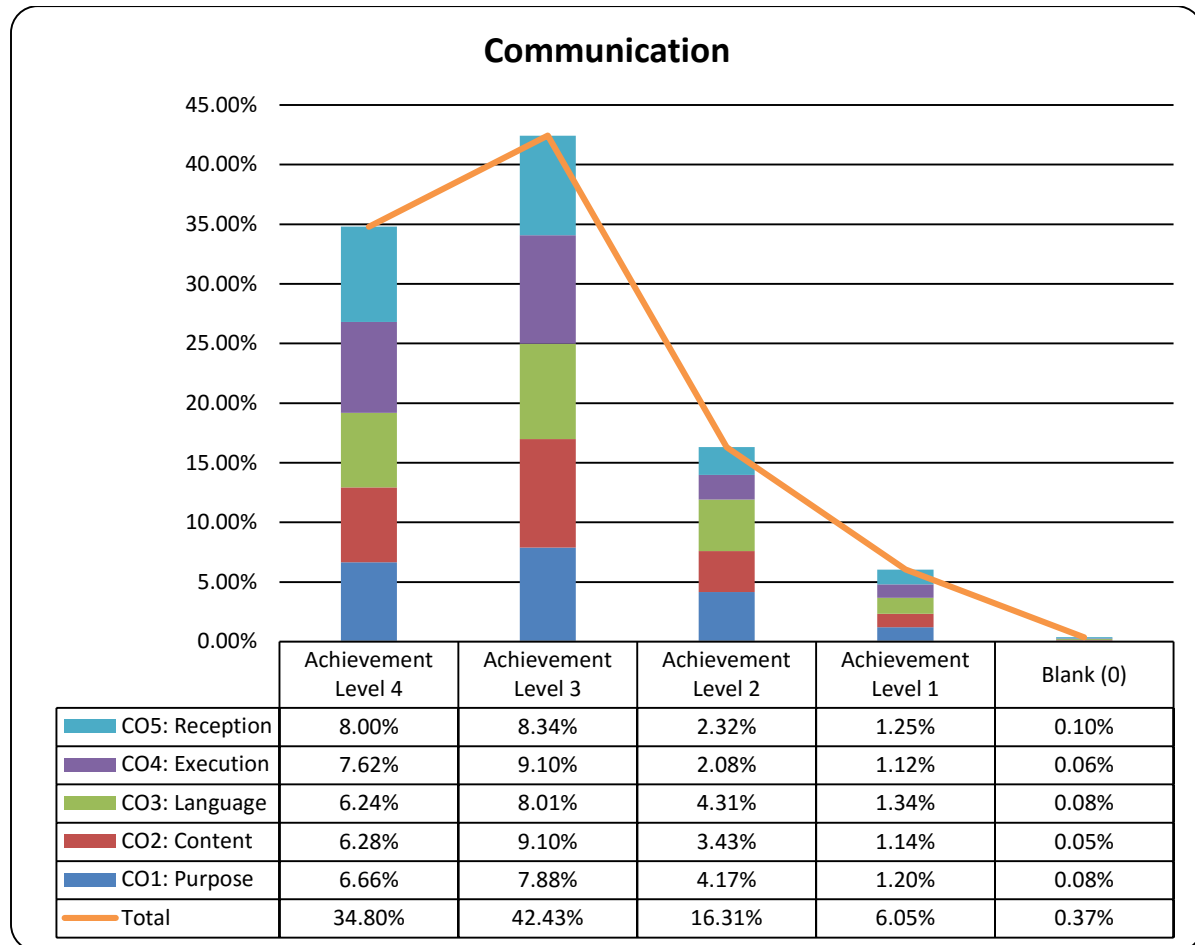
Critical Thinking Results
Table 11 shows the college-wide Critical Thinking learning outcome score for Fall 2016-Spring 2017. In calculating the average score, blanks were given a score of zero. Therefore, the average score is on a scale of 0 to 4, with four being the highest level of achievement.

Chart 3 shows percentage of students scoring at each achievement level per descriptor.

Table 13

Fall 2016-Spring 2017 - Assessment – All Locations		
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Critical Thinking	1,926	2,056	**3.05**

Chart 3

Critical Thinking

	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1	Blank (0)
CT6: Assess Results	7.50%	5.44%	2.43%	0.88%	0.57%
CT5: Utilize Resources	5.92%	6.90%	2.38%	0.70%	0.52%
CT4: Evaluate Resources	5.04%	6.96%	3.16%	0.82%	0.67%
CT3: Gather Resources	9.71%	4.23%	1.61%	0.60%	0.66%
CT2: Determine Needs	7.18%	6.12%	2.15%	0.73%	0.47%
CT1: Identify Issue	7.77%	5.75%	1.91%	0.70%	0.51%
Total	43.12%	35.40%	13.64%	4.43%	3.40%

- 78.52% of Critical Thinking assessments were rated at achievement level 4 or achievement level 3
- CT3: Gather Resources assessed more students at achievement level 4 (9.71%) than the other descriptors assessing at achievement level 4
- CT4: Evaluate Resources assessed more students at achievement level 3 (6.96%) than the other descriptors assessing at achievement level 3
- CT4: Evaluate Resources assessed more students at achievement level 2 (3.16%) than the other descriptors assessing at achievement level 2
- CT6: Assess Results assessed more students at achievement level 1 (0.88%) than the other descriptors assessing at achievement level 1

Cultural and Global Engagement

Definition
Cultural and Global Engagement: Encompasses the awareness of cultural systems, events, and creations and an ability to apply this cultural and global awareness to human interaction and expression. See Appendix A for Scoring Guidelines.

Descriptors
1. Cultural Knowledge: Identify cultural systems, events, or creations.
2. Global Influences: Identify the global forces that shape cultural subculture.
3. Cultural and Global Self Awareness: Analyze and explain the impact of culture and experience on one's worldview and behavior, including stereotypes, assumptions, biases, and prejudices.
4. Cultural and Global Awareness: Analyze and explain the impact of historical events, perspectives, or cultures on world societies, human interaction and expression, and the natural environment.
5. Inclusiveness: Demonstrate a willingness and ability to engage with other cultures and global societies.
6. Cultural Expression: Generate ideas, creations, or models that express the human condition and our relationship with the world around us.

Cultural and Global Engagement Results
Table 12 shows the college-wide Cultural and Global Engagement learning outcome score for Fall 2016-Spring 2017. 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.

Chart 4 shows the percentage of students scoring at each achievement level per descriptor.

Table 14

Fall 2016-Spring 2017 - Assessment – All Locations			
Learning Outcome	**# of Students**	**# of Assessments**	**Average Score**
Cultural and Global Engagement	1,069	1,127	**3.00**

Chart 4

Cultural and Global Engagement

	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1	Blank (0)
CG6: Cultural Expression	4.34%	7.04%	4.27%	0.62%	0.39%
CG5: Inclusiveness	7.58%	7.32%	1.16%	0.51%	0.08%
CG4: Cultural and Global Awareness	4.11%	7.28%	4.74%	0.48%	0.06%
CG3: Cultural and Global Self Awareness	4.09%	7.24%	4.64%	0.60%	0.08%
CG2: Global Incluences	3.74%	10.17%	2.09%	0.47%	0.19%
CG1: Cultural Knowledge	4.05%	10.44%	1.63%	0.51%	0.08%
Total	27.91%	49.49%	18.53%	3.19%	0.88%

- 49.49% of Cultural and Global assessments were rated at achievement level 3
- CG5: Inclusiveness assessed more students at achievement level 4 (7.58%) than the other descriptors assessing at achievement level 4
- CG1: Cultural Knowledge assessed more students at achievement level 3 (10.44%) than the other descriptors assessing at achievement level 3
- CG4: Cultural and Global Awareness assessed more students at achievement level 2 (4.74%) than the other descriptors assessing at achievement level 2
- Less than 1% of students assessed at achievement level 1 for each descriptors

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, a number of 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.

Graduate Exit Survey

Upon application for graduation, all students are asked to complete an on-line survey. Of the 2,258 students who received a degree or certificate award from MCC during FY 2016-2017, 1,608 submitted valid graduate exit surveys. A relatively small number of invalid responses may be due to students entering incorrect identification numbers in the survey, or students failing to complete requirements needed to graduate after initially completing the survey.

Students are asked the extent to which the college experience has prepared them to transfer to a four-year college or university. The mean scores and share of students who say they are "very well prepared" for transfer has remained stable over the last ten years with a percentage decrease AY 2013-2014 as illustrated in Table 15.

Table 15

Mesa Community College **Graduate Exit Survey Results** **"How well prepared do you feel to transfer?"**										
	AY 2007-2008	AY 2008-2009	AY 2009-2010	AY 2010-2011	AY 2011-2012	AY 2012-2013	AY 2013-2014	AY 2014-2015	AY 2015-2016	AY 2016-2017
Mean score (scale 1-4)	3.6	3.6	3.6	3.6	3.6	3.6	3.4	3.6	3.6	3.6
Very prepared	65%	61%	61%	60%	59%	61%	46%	63%	61%	66%
Somewhat prepared	32%	37%	36%	36%	38%	36%	50%	35%	36%	32%
Somewhat unprepared	2%	1%	2%	2%	2%	2%	3%	2%	2%	2%
Very unprepared	1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%

The responses of a subset of students whose educational goals are in a Career and Technical field are presented in Table 16. Students were asked, "How well prepared do you feel for entering the workplace?" The mean preparedness score has remained stable over the past several years.

Table 16

<table>
<tr><th colspan="11">Mesa Community College
Graduate Exit Survey Results
"How well prepared do you feel for entering the workplace?"</th></tr>
<tr><th></th><th>AY 2007-2008</th><th>AY 2008-2009</th><th>AY 2009-2010</th><th>AY 2010-2011</th><th>AY 2011-2012</th><th>AY 2012-2013</th><th>AY 2013-2014</th><th>AY 2014-2015</th><th>AY 2015-2016</th><th>AY 2016-2017</th></tr>
<tr><td>Mean Score (scale 1-4)</td><td>3.6</td><td>3.7</td><td>3.7</td><td>3.5</td><td>3.5</td><td>3.4</td><td>3.2</td><td>3.4</td><td>3.4</td><td>3.4</td></tr>
<tr><td>Very prepared</td><td>69%</td><td>71%</td><td>70%</td><td>57%</td><td>53%</td><td>50%</td><td>30%</td><td>49%</td><td>47%</td><td>52%</td></tr>
<tr><td>Somewhat prepared</td><td>26%</td><td>29%</td><td>28%</td><td>39%</td><td>42%</td><td>44%</td><td>63%</td><td>46%</td><td>47%</td><td>43%</td></tr>
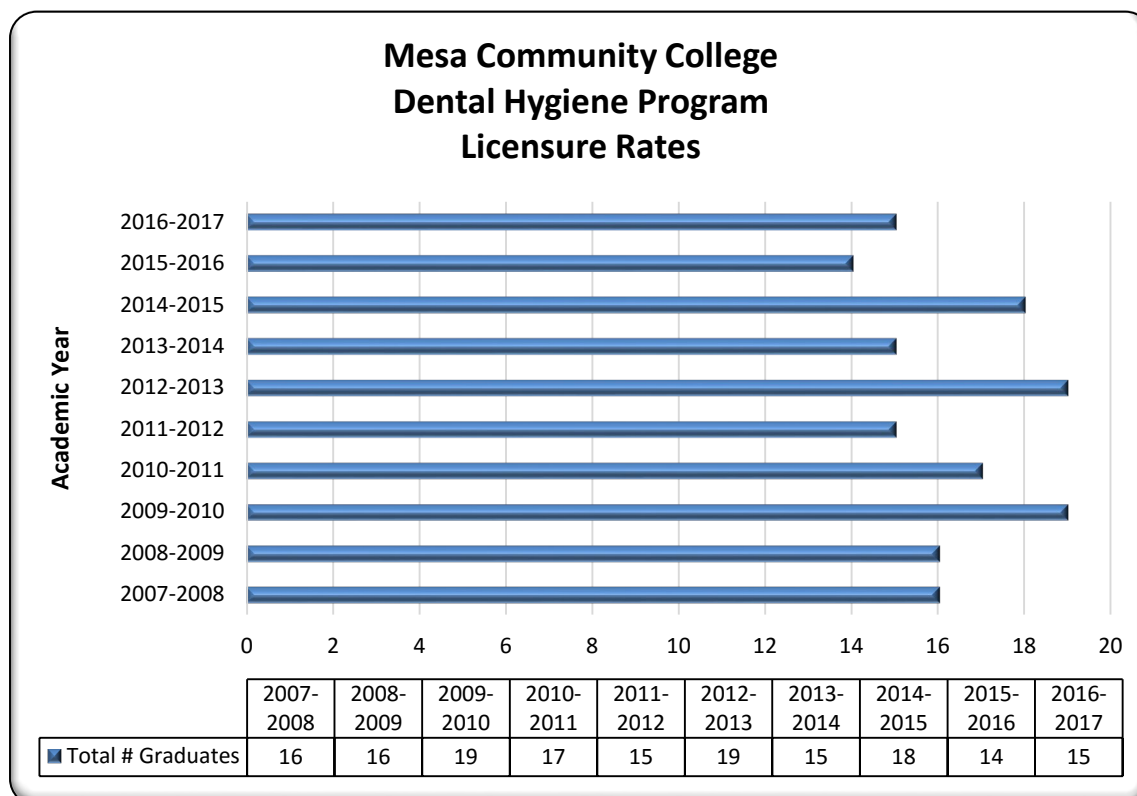<tr><td>Somewhat unprepared</td><td>3%</td><td>0%</td><td>1%</td><td>4%</td><td>4%</td><td>5%</td><td>6%</td><td>4%</td><td>5%</td><td>4%</td></tr>
<tr><td>Very unprepared</td><td>1%</td><td>0%</td><td><1%</td><td>0%</td><td>1%</td><td><1%</td><td>1%</td><td>1%</td><td>1%</td><td>1%</td></tr>
</table>

Licensure and Certification

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

Dental Hygiene

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 5

Mesa Community College Dental Hygiene Program Licensure Rates

Academic Year	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Total # Graduates	16	16	19	17	15	19	15	18	14	15

Fire Science and EMT

The MCC Fire Science program offers certification in several areas as detailed in Tables 17-18. The Fire Fighter I and II Certification and the Hazardous Materials First Responder are both granted by the Arizona State Fire Marshall's Office. The actual success rate of attainment of the certificates may be underestimated because only the initial attempt at passage is reported back to the college. Students have three chances to pass the certification.

Table 17

Fire Science and EMT Licensing Agencies	
License/Certification	Agency
Candidate Physical Agility Test (FSC 130)	International Association of Firefighters
	International Fire Chiefs Association
Hazardous Materials/First Responder (FSC 105)	Arizona Center for Fire Service Excellence
Fire Operations (FSC 102)	Arizona Center for Fire Service Excellence
Wildland Firefighter (FSC 110)	Arizona Bureau of Land Management
Paramedic (EMT 272)	Arizona State Department of Health Services and National Registry of EMTs
EMT (EMT 104)	Arizona State Department of Health Services and National Registry of EMTs
Fire Investigation	Arizona International Association of Arson Investigators
Cardiopulmonary Resuscitation (EMT 101)	American Heart Association

Table 18

Mesa Community College - Fire Science/EMT Passage Rates									
License/Certification	Spring/Summer 2015			Spring/Summer 2016			Spring/Summer 2017		
	Attempt	Passed	%	Attempt	Passed	%	Attempt	Passed	%
Wildland Firefighter (FSC 110)	14	14	100%	0	0	0	21	21	100%
Fire Department Operations (FSC 102)	31	31	100%	20	17	85%	19	19	100%
Hazardous Materials/First Responder (FSC105)	37	36	97%	43	36	84%	38	30	79%
Candidate Physical Ability Test (FSC 130)	31	19	61%	25	17	68%	30	18	60%
Cardiopulmonary Resuscitation (EMT 101)	241	241	100%	223	223	100%	349	349	100%
EMT (EMT 104: 3 attempts are allowed)	134	119	89%	145	125	86%	125	108	86%
Paramedic (EMT 272: 3 attempts are allowed)	25	24	96%	23	23	100%	20	18	90%

Mortuary Science

The students in the Mortuary Science program must take the National Board Examination (NBE) to graduate. Most states accept the scores on the NBE in lieu of having their own state exam. The National Board Exam is administered by the International Conference of Funeral Service Examining Boards. Licensure is on a state-by-state basis. There are two components of the NBE, Funeral Service Arts and Funeral Service Science. In 2008, the International Conference of Funeral Service Examining Boards began to report the pass rate of the two components separately. The statistics reported in Table 19 reflects NBE passage rates before the exam was broken down into components. Table 20 reflects the new manner in which scores are reports.

According to the Mortuary Science program director, almost all graduates eventually pass the exam and are licensed. Due to addition, state licensure requires beyond the NBE such as internships, students may not receive state licensure for several years after graduation from the Mortuary Science program. About one-third of students in the program are from out-of-state.

Table 19

	# Graduates	Passed licensure exam		National Pass Rate	Licensed
Mesa Community College **Mortuary Science Examinations**					
1999-2000	22	20	91%	82%	20
2000-2001	14	13	93%	86%	11
2001-2002	17	17	100%	85%	16
2002-2003	21	19	95%	84%	15
2003-2004	29	26	90%	67%	17
2004-2005	16	12	75%	74%	16
2005-2006	25	22	88%	72%	19
2006-2007	21	14	67%	70%	Not Reported

Table 20

	Graduates	Funeral Service Arts			Funeral Service Science		
Mesa Community College **Mortuary Science National Board Examinations**							
	#	#	Pass	%	#	Pass	%
2007-2008	22	23	18	78%	25	19	76%
2008-2009	13	16	12	75%	14	9	64%
2009-2010	27	27	24	89%	26	21	81%
2010-2011	30	29	21	72%	29	24	83%
2011-2012	34	34	25	74%	34	27	79%
2012-2013	25	25	19	76%	26	21	81%
2013-2014	29	29	21	72%	33	25	76%
2014-2015	35	27	19	70%	24	17	71%

Note: July 1, 2016 the Mortuary Science program moved from MCC to Chandler-Gilbert Community College

Network Academy

The Network Academy offers certification pathways in Network Administration, Network Security, Microsoft, Red Hat Linux, VMware, Information Assurance, and Workplace Skills. Training formats include fast tracks, traditional semesters, distance learning, and internet deliveries. Network Academy students earn industry certification after completion of the program; however, there is not a formal mechanism for reporting certifications back to the program.

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 21 below.

Table 21

Mesa Community College Nursing Program NCLEX RN Examination			
	Total # Graduates	# Graduates Taking NCLEX RN Exam	Pass Rate of Exam Takers
Spring 2007	75	75	92%
Fall 2007	50	47	98%
Spring 2008	106	106	97%
Fall 2008	105	105	96%
Spring 2009	93	93	97%
Fall 2009	50	50	98%
Spring 2010 - S&D	98	98	100%
Spring 2010 - Boswell	46	45	100%
Spring 2011 - S&D	60	58	91%
Spring 2011 - Boswell	45	44	100%
Spring 2012 - S&D	52	52	100%
Spring 2012 - Boswell	55	54	98%
Spring 2013 - S&D	53	50	98%
Spring 2013 - Boswell	25	25	100%
Spring 2014	67	66	100%
Spring 2015	84	83	95%
Spring 2016	83	78	96%
Spring 2017	83	73	95%

Note: Boswell closed Dec 1, 2013

Veterinary Technology

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.
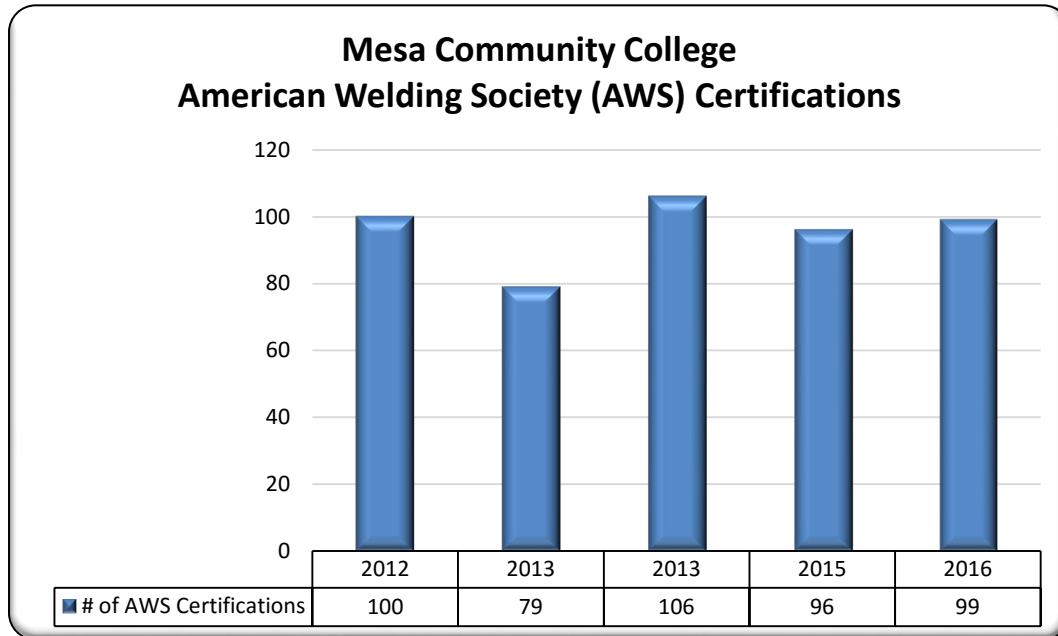
Table 22

	Mesa Community College **Veterinary Technology Board Exam Pass Rates**		
	Graduates	**% Passed State Exam**	**% Passed National Exam**
2007-2008	5	100%	100%
2008-2009	4	100%	100%
2009-2010	8	100%	100%
Fall 2010	4	100%	100%
Spring 2011	4	100%	100%
Fall 2011	0	N/A	N/A
Spring 2012	2	100%	100%
Fall 2012	2	100%	100%
Spring 2013	8	100%	100%
Fall 2013	2	50%	50%
Spring 2014	13	85%	85%
Fall 2014	0	N/A	N/A
Spring 2015	15	93%	93%
Fall 2015	0	N/A	N/A
Spring 2016	10	100%	100%
Fall 2016	0	N/A	N/A
Spring 2017	10 (6 sat for boards)	100%	100%

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 6.

Chart 6

Mesa Community College
American Welding Society (AWS) Certifications

	2012	2013	2013	2015	2016
# of AWS Certifications	100	79	106	96	99

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

Course Completion

Data about course completion is provided for Fall semesters in Table 23. The percentages of successful/unsuccessful students completing a course and those withdrawing from a course have remained relatively stable.

Table 23

Mesa Community College - Course Completion				
	Successful (A, B, C, P)	**Unsuccessful (D, F, Z)**	**Completer Sub-total**	**Withdrew (W,Y)**
Fall 2007	68%	8%	77%	23%
Fall 2008	70%	9%	78%	22%
Fall 2009	70%	9%	79%	21%
Fall 2010	69%	9%	78%	22%
Fall 2011	69%	10%	79%	21%
Fall 2012	70%	10%	80%	20%
Fall 2013	72%	10%	82%	18%
Fall 2014	73%	10%	83%	17%
Fall 2015	74%	10%	84%	16%
Fall 2016	74%	10%	84%	16%

Persistence

Cohorts of new full time students were followed for two semesters to track their enrollment in the college. Students are further grouped based upon what they declared as their intent at the time of registration. The tables below show the overall persistence of new full time students who started attending MCC in Fall 2015 and Fall 2016.

Table 24

Mesa Community College **New Full Time Student Persistence**					
	Enrolled Fall 2015	**Remained Spring 2016**		**Remained Fall 2016**	
Full time total new students	1,855	1,634	89.19%	1,154	64.45%
Full time new transfer students	1,193	1,060	89.08%	763	64.83%
Full time new career students	370	314	87.96%	214	62.30%

Table 25

Mesa Community College **New Full Time Student Persistence**					
	Enrolled Fall 2016	**Remained Spring 2017**		**Remained Fall 2017**	
Full time total new students	1,668	1,473	88.63%	1,040	63.34%
Full time new transfer students	1,295	1,150	89.01%	830	64.89%
Full time new career students	404	344	88.43%	236	62.60%

Note: High school and graduating students not included.

Degree and Certificate Awards

MCC conferred 2,235 degrees and 2,063 certificates in FY 2016-17. This is a decrease of degrees and certificates conferred from FY 2015-2016.
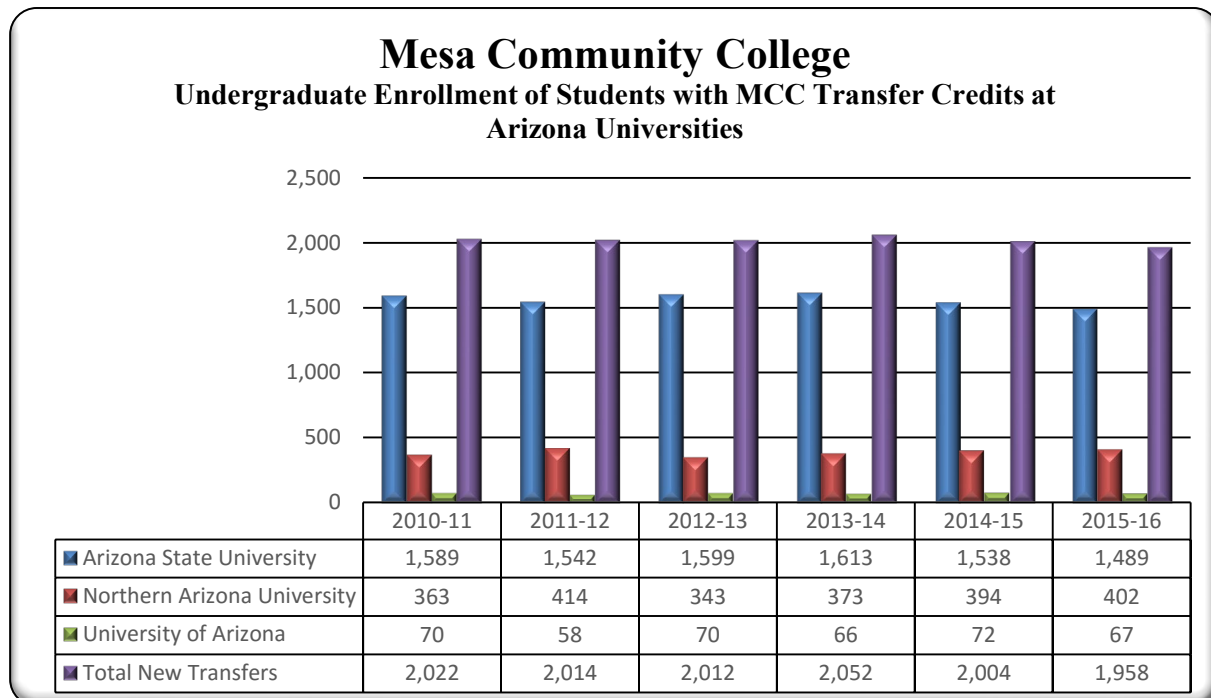
Table 26

Degree Type	Awards FY 2014-2015		Awards FY 2015-2016		Awards FY 2016-2017		Trend
	# Awarded	% of All Awards	# Awarded	% of All Awards	# Awarded	% of All Awards	
AA	1,055	24%	1,102	24%	1,088	25%	
AAS	613	14%	600	13%	588	14%	
AB	120	3%	171	4%	160	4%	
AGS	195	4%	180	4%	207	5%	
AS	180	4%	187	4%	192	4%	
Total Degrees	**2,163**	**49%**	**2,240**	**49%**	**2,235**	**52%**	
AC	40	1%	41	1%	36	1%	
AGEC	1,381	32%	1,482	33%	1,440	33%	
CCL	783	18%	778	17%	587	14%	
Total Certificates	**2,204**	**51%**	**2,301**	**51%**	**2,063**	**48%**	
Total All	**4,367**	**100%**	**4,541**	**100%**	**4,298**	**100%**	

Note: Awards are reported by Fiscal Year (FY), which runs from July 1 to June 30
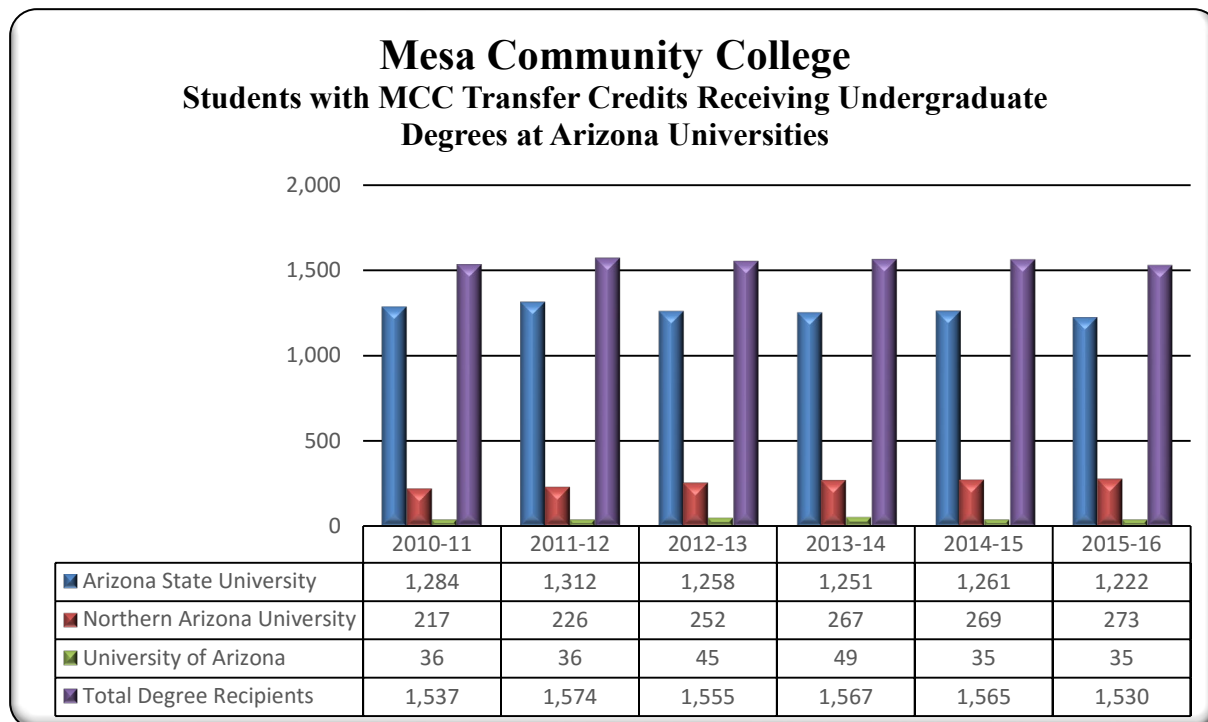
Transfer

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

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Arizona State University	1,589	1,542	1,599	1,613	1,538	1,489
Northern Arizona University	363	414	343	373	394	402
University of Arizona	70	58	70	66	72	67
Total New Transfers	2,022	2,014	2,012	2,052	2,004	1,958

Source: Assist Data Warehouse

Chart 8

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

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Arizona State University	1,284	1,312	1,258	1,251	1,261	1,222
Northern Arizona University	217	226	252	267	269	273
University of Arizona	36	36	45	49	35	35
Total Degree Recipients	1,537	1,574	1,555	1,567	1,565	1,530

Source: Assist Data Warehouse

Developmental Education Course Completion and Subsequent Success

The overall course completion for developmental reading, English and math students is detailed in the table that follows. While withdrawal rates in developmental courses decreased each Fall semester from 2005 to 2011, there was a slight increase in 2012, and a decrease 2013, 2014 and 2015. The withdrawal rates stayed constant from 2015 to 2016.

Table 27

Mesa Community College Developmental Education Course Completion				
	Successful (A, B, C, P)	**Unsuccessful (D, F, Z)**	**Completer Sub-total**	**Withdrew (W,Y)**
Fall 2005	48%	16%	64%	36%
Fall 2006	51%	14%	65%	35%
Fall 2007	53%	14%	67%	33%
Fall 2008	57%	13%	70%	30%
Fall 2009	59%	14%	73%	27%
Fall 2010	61%	14%	75%	25%
Fall 2011	60%	17%	77%	23%
Fall 2012	56%	19%	75%	25%
Fall 2013	60%	17%	77%	23%
Fall 2014	63%	18%	81%	19%
Fall 2015	67%	15%	82%	18%
Fall 2016	66%	16%	82%	18%

Of students that were successful in a developmental course, performance in subsequent 100 level or higher courses in the following year is described in Table 28. The subsequent success rates for Fall 2009, Fall 2011 and Fall 2015 developmental student cohorts are the highest success rate in this nine-year trend.

Table 28

Mesa Community College Developmental Education students Subsequent success in 100 level or Above Course				
	Successful in any 100+ level subsequent course	**Unsuccessful in all subsequent courses**	**Withdrew from all subsequent courses**	**Did not enroll in subsequent 100+ level course**
Fall 2007 followed through Fall 2008	70%	5%	10%	15%
Fall 2008 followed through Fall 2009	72%	6%	7%	15%
Fall 2009 followed through Fall 2010	76%	5%	8%	11%
Fall 2010 followed through Fall 2011	75%	5%	9%	11%
Fall 2011 followed through Fall 2012	76%	4%	7%	12%
Fall 2012 followed through Fall 2013	74%	6%	7%	14%
Fall 2013 followed through Fall 2014	73%	6%	8%	13%
Fall 2014 followed through Fall 2015	74%	6%	6%	13%
Fall 2015 followed through Fall 2016	76%	5%	6%	14%

Appendix A

MCC's 4Cs Scoring Guidelines

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:	**Achievement Level 4**	**Achievement Level 3**	**Achievement Level 2**	**Achievement Level 1**
1. INCLUSIVENESS: Demonstrate an ability to engage respectfully with others in a diverse society	DEMONSTRATES EVIDENCE of ENGAGING RESPECTFULLY with diverse communities in an INTENTIONAL and REFLECTIVE WAY to promote, lead, and advocate civic action	DEMONSTRATES EVIDENCE of ENGAGING RESPECTFULLY with diverse communities to further civic action	DEMONSTRATES EVIDENCE of HAVING PARTICIPATED with diverse communities to further civic action	FAILS TO DEMONSTRATE EVIDENCE OF PARTICIPATING with diverse communities
2. APPLY KNOWLEDGE: Apply the knowledge from one's own study and experiences to active and ethical participation in civic life	CONNECT one's knowledge to one's actions in an INTENTIONAL, REFLECTIVE, and ETHICAL civic life	CONNECT one's knowledge to one's actions in an ETHICAL civic life	CONNECT one's knowledge to civic engagement and participation	LACKS the knowledge REQUIRED TO CONNECT to civic engagement and participation
3. DEMONSTRATION OF CIVIC IDENTITY AND COMMITMENT: Provide evidence of experience in and reflection on civic engagement activities	DEMONSTRATES INTENTIONAL REFLECTION on one's own civic identity and the ability to PROMOTE, LEAD and ADVOCATE civic action	DEMONSTRATES REFLECTION on one's own civic identity and the ability to PROMOTE and ADVOCATE civic action	DEMONSTRATES AWARENESS of one's own civic identity and LIMITED EXPERIENCE in civic engagement activities	DEMONSTRATES LIMITED AWARENESS of one's own civic identity and NO EXPERIENCE in civic engagement activities
4. CIVIC COMMUNICATION: Communicate and listen to others in order to establish personal and professional relationships to further civic action	COMMUNICATES and LISTENS EFFECTIVELY and INTENTIONALLY in a variety of contexts to INITIATE and SUSTAIN civic action	COMMUNICATES and LISTENS EFFECTIVELY in a variety of contexts to FOSTER civic action	COMMUNICATES and LISTENS with others in a limited number of contexts to FOSTER civic action	DEMONSTRATES LIMITED ABILITY TO COMMUNICATE and LISTEN with others to engage in 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	DEMONSTRATES LEADERSHIP CAPABILITY, REFLECTIVE INSIGHTS, and the ABILITY AND COMMITMENT to work deliberatively and collaboratively across and within community contexts and structures to achieve a civic aim	DEMONSTRATES ABILITY AND COMMITMENT to work deliberatively and collaboratively across and within community contexts and structures to achieve a civic aim	DEMONSTRATES EXPERIENCE identifying intentional ways to participate in civic contexts and structures	DEMONSTRATES LIMITED experience participating in civic contexts and structures

Communication Scoring Guidelines

DEFINITION: Communication is the purposeful development, expression and reception of a message through oral, written or nonverbal means.				
Descriptors:	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1
1. PURPOSE: Establish a clear central focus for a message which demonstrates an understanding of context, audience and task	Purpose is PRECISELY STATED AND MEMORABLE for audience, context, and task	Purpose is PRECISELY STATED for audience, context, and task	Purpose is STATED for audience, context, and task	Purpose is NOT CLEARLY STATED for audience, context, and task
2. CONTENT: Develop appropriate, relevant content logically sequencing ideas and/or information	Relevant content is developed EXPERTLY, LOGICALLY sequencing IDEAS AND/OR INFORMATION	Relevant content is developed APPROPRIATELY, LOGICALLY sequencing IDEAS AND/OR INFORMATION	Relevant content is developed SPORADICALLY, sequencing ONLY POINTS	Message developed is SIMPLE and LACKS relevant content and sequencing
3. LANGUAGE: Apply language of a discipline in an appropriate and accurate manner to demonstrate comprehension	Language choices and/or modes of expression are THOUGHTFUL, MEMORABLE, COMPELLING AND APPROPRIATE to audience AND discipline	Language choices and/or modes of expression are THOUGHTFUL AND APPROPRIATE to audience AND discipline	Language choices and/or modes of expression are APPROPRIATE to audience OR discipline	Language choices and/or modes of expression DETRACT from message
4. EXECUTION: Convey a message effectively	CONSISTENTLY conveys intended message	MOSTLY conveys intended message	SELDOM conveys intended message	FAILS TO convey intended message
5. RECEPTION: Utilize appropriate oral, written or nonverbal means to receive and/or interpret a message effectively	CONSISTENTLY utilizes appropriate oral, written or nonverbal means to receive and/or interpret intended message	MOSTLY utilizes appropriate oral, written or nonverbal means to receive and/or interpret intended message	SELDOM utilizes appropriate oral, written or nonverbal means to receive and/or interpret intended message	FAILS TO utilize appropriate oral, written or nonverbal means to receive and/or interpret intended message

Critical Thinking Scoring Guidelines

DEFINITION: Critical thinking is the mental process of effectively identifying, determining, gathering, evaluating and utilizing resources to innovate and/or to accomplish a specific task.

Descriptors:	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1
1. IDENTIFY ISSUE: Identify and interpret a problem or issue	Issue/problem CLEARLY identified and described COMPREHENSIVELY, delivering ALL relevant information (terms defined, ambiguities explored, boundaries determined and/or backgrounds provided) necessary for FULL understanding	Issue/problem identified and described, delivering MOST of the relevant information (terms defined, ambiguities explored, boundaries determined and/or backgrounds provided) necessary for ADEQUATE understanding	Issue/problem identified but description leaves SOME terms undefined, ambiguities unexplored, boundaries undetermined and/or backgrounds unknown, impeding understanding	Issue/problem NOT clearly identified and described, FAILING to deliver relevant information necessary for understanding
2. DETERMINE NEEDS: Determine the resources needed	EFFECTIVELY AND COMPREHENSIVELY defines the scope of resources needed (key concepts and types of resources) to solve a problem or explore an issue	DEFINES the scope of resources needed (key concepts and types of resources) to solve a problem or explore an issue	INCOMPLETELY defines the scope of resources needed (key concepts and types of resources) to solve a problem or explore an issue	HAS DIFFICULTY defining the scope of resources needed (key concepts and types of resources) to solve a problem or explore an issue
3. GATHER RESOURCES: Gather resources effectively and efficiently	Gathers resources from appropriate and relevant sources using a variety of EFFECTIVE, WELL-DESIGNED strategies	Gathers resources from SOME appropriate and relevant sources using a VARIETY of strategies	Gathers resources from FEW appropriate and relevant sources using SIMPLE strategies	FAILS to use resource gathering strategies
4. EVALUATE RESOURCES: Evaluate resources critically	Evaluation of resources (history of the issue/problem; logic/reasoning; feasibility; impact; own and other's assumptions, bias, authority and relevance) is DEEP and THOROUGH	Evaluation of resources (history of the issue/problem; logic/reasoning; feasibility; impact; own and other's assumptions, bias, authority and relevance) is ADEQUATE	Evaluation of resources (history of the issue/problem; logic/reasoning; feasibility; impact; own and other's assumptions, bias, authority and relevance) is SUPERFICIAL	Evaluation of resources (history of the issue/problem; logic/reasoning; feasibility; impact; own and other's assumptions, bias, authority and relevance) is ABSENT
5. UTILIZE RESOURCES: Utilize resources effectively and creatively to innovate and/or to accomplish a specific task	Presents resources, organizes resources and synthesizes those resources to FULLY ACHIEVE a specific task WITH CLARITY, PRECISION and DEPTH	Presents resources, organizes resources and synthesizes those resources to ACHIEVE a specific task	Presents resources and organizes resources but FAILS to synthesize those resources. Consequently, a specific task is MINIMALLY ACHIEVED	Presents resources but resources are FRAGMENTED and/or USED INAPPROPRIATELY. Consequently, a specific task is NOT ACHIEVED
6. ASSESS RESULTS: Assess and evaluate results	INTENTIONALLY and THOROUGHLY REFLECTS upon the results of the specific task and/or innovation in a LOGICAL manner appropriate to the discipline	REFLECTS upon the results of the specific task and/or innovation in a LOGICAL manner appropriate to the discipline	REFLECTS upon the results of the specific task and/or innovation in a SOMEWHAT LOGICAL manner appropriate to the discipline	REFLECTS upon the results of the specific task and/or innovation WITH VERY LIMITED ATTENTION TO LOGICAL STRUCTURES and APPROPRIATENESS to the discipline

Cultural and Global Engagement Scoring Guidelines

DEFINITION: Cultural and global engagement encompasses the awareness of cultural systems, events, and creations and an ability to apply this cultural and global awareness to human interaction and expression.

Descriptors:	Achievement Level 4	Achievement Level 3	Achievement Level 2	Achievement Level 1
1. CULTURAL KNOWLEDGE: Identify cultural systems, events, or creations	THOROUGHLY IDENTIFIES one's own and other cultural systems, events, or creations	IDENTIFIES one's own and other cultural systems, events, or creations	IDENTIFIES one's own cultural systems, events, or creations but SELDOM IDENTIFIES other cultures	SELDOM IDENTIFIES one's own cultural systems, events, or creations and LACKS ABILITY to IDENTIFY other cultures
2. GLOBAL INFLUENCES: Identify the global forces that shape culture and subculture	THOROUGHLY IDENTIFIES the global forces that shape one's own and other cultures and subcultures	IDENTIFIES the global forces that shape one's own and other cultures and subcultures	SELDOM IDENTIFIES the global forces that shape one's own and other cultures and subcultures	INABILITY TO IDENTIFY the global forces that shape one's own and other cultures and subcultures
3. CULTURAL AND GLOBAL SELF AWARENESS: Analyze and explain the impact of culture and experience on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes	EXTENSIVELY ANALYZES and EXPLAINS the impact of culture and experience on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes	ANALYZES and EXPLAINS the impact of culture and experience on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes	DEMONSTRATES LIMITED ABILITY to ANALYZE and EXPLAIN the impact of culture and experience on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes	LACKS ABILITY to ANALYZE and EXPLAIN the impact of culture and experience on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes
4. CULTURAL AND GLOBAL AWARENESS: Analyze and explain the impact of historical events, perspectives, or cultures on world societies, human interaction and expression, and the natural environment	EXTENSIVELY ANALYZES and EXPLAINS the impact of historical events, perspectives, or cultures on world societies, human interactions and creativity, and natural environment	ANALYZES and EXPLAINS the impact of historical events, perspectives, or cultures on world societies, human interactions and creativity, and natural environment	DEMONSTRATES LIMITED ABILITY to ANALYZE and EXPLAIN the impact of historical events, perspectives, or cultures on world societies, human interactions and creativity, and natural environment	LACKS ABILITY to ANALYZE and EXPLAIN the impact of historical events, perspectives, or cultures on world societies, human interactions and creativity, and natural environment
5. INCLUSIVENESS: Demonstrate a willingness and ability to engage with other cultures and global societies	DEMONSTRATES STRONG WILLINGNESS AND ABILITY to engage with other cultures and global societies	DEMONSTRATES WILLINGNESS AND ABILITY to engage with other cultures and global societies	DEMONSTRATES LIMITED WILLINGNESS AND ABILITY to engage with other cultures and global societies	LACKS WILLINGNESS OR ABILITY to engage with other cultures and global societies
6. CULTURAL EXPRESSION: Generate ideas, creations, or models that express the human condition and our relationship with the world around us	GENERATES INNOVATIVE ideas, creations, or models that express human condition and one's relationship with the world	GENERATES ideas, creations, or models that express human condition and one's relationship with the world	GENERATES LIMITED ideas, creations, or models that express human condition and one's relationship with the world	LACKS ABILITY to GENERATE ideas, creations, or models that express human condition and one's relationship with the world

Appendix B

MCC's Annual Assessment Results Summary
AY 2015-2016

Mesa Community College Annual Assessment Results Summary AY 2015-2016
- 3,061 students were assessed in 88 different courses from 17 departments
- 71 residential and 31 adjunct faculty administered the assessments in 64 different sections
- 748 (duplicated count) students were assessed in Civic Engagement
- 1,163 (duplicated count) students were assessed in Communication
- 1,364 (duplicated count) students were assessed in Critical Thinking
- 596 (duplicated count) students were assessed in Cultural and Global Engagement

Outcome	Results
Civic Engagement	66.44% of Civic Engagement assessments were rated at achievement level 4 or achievement level 3 - CE5: Engagement in Civic Action and Reflection assessed more students at achievement level 4 (7.46%) than the other descriptors assessing at achievement level 4 - CE2: Application and Knowledge assessed more students at achievement level 3 (6.84%) than the other descriptors assessing at achievement level 3 - CE5: Engagement in Civic Action and Reflection assessed more students at achievement level 2 (4.60%) than the other descriptors assessing at achievement level 2 - CE4: Civic Communication assessed more students at achievement level 1 (2.94%) than the other descriptors assessing at achievement level 1
Communication	48.17% of Communication assessments were rated at achievement level 3 - CO5: Reception assessed more students at achievement level 4 (6.26%) than the other descriptors assessing at achievement level 4 - CO4: Execution assessed more students at achievement level 3 (10.71%) than the other descriptors assessing at achievement level 3 - CO3: Language assessed more students at achievement level 2 (4.75%) than the other descriptors assessing at achievement level 2 - All descriptors assessing at achievement level 1 were less than 1%
Critical Thinking	76.41% of Critical Thinking assessments were rated at achievement level 4 or achievement level 3 - CT3: Gather Resources assessed more students at achievement level 4 (9.04%) than the other descriptors assessing at achievement level 4 - CT5: Utilize Resources assessed more students at achievement level 3 (5.96%) than the other descriptors assessing at achievement level 3 - CT4: Evaluate Resources assessed more students at achievement level 2 (3.71%) than the other descriptors assessing at achievement level 2 - CT4: Evaluate Resources assessed more students at achievement level 1 (1.34%) than the other descriptors assessing at achievement level 1
Cultural and Global Engagement	43.04% of Cultural and Global assessments were rated at achievement level 3 - CG5: Inclusiveness assessed more students at achievement level 4 (6.21%) than the other descriptors assessing at achievement level 4 - CG1: Cultural Knowledge assessed more students at achievement level 3 (8.08%) than the other descriptors assessing at achievement level 3 - CG4: Cultural and Global Awareness assessed more students at achievement level 2 (4.39%) than the other descriptors assessing at achievement level 2 - CG4: Cultural and Global Awareness and CG3: Cultural and Global Self Awareness assessed more students at achievement level 1 (1.65%) than the other descriptors assessing at achievement level 1