SAN DIEGO MESA COLLEGE

Program Review

Summary and Reflections with Unit Goals, Action Plans, and Updates

Instructional Program - Architechture (ARCH)

Executive Summary

Describe the successes and challenges your unit has faced since the last comprehensive review.
Successes:

The following challenges were noted in the 2018/19 comprehensive review and have since been successfully achieved:

Computer Hardware Replacement
New computers, monitors and Ben-Q boards have been installed in the studios, jury room, auditorium and model shop. Strong work force and Heerf funding covered the expense.

Ceiling Document Camera, Ceiling Projector Replacement & Related Podium Upgrades
All items have been replaced. Strong work force money made this happen.

Computer Software and Hardware
A new school policy to cover the cost of most classroom software, has alleviated our need to search for money to run our computer courses.

Replacement of Model Building Equipment
We have received a donated CNC machine, larger than the one we currently have, and we have hired a fulltime ILT to run the Model Building Shop. A large CNC machine was donated.
We also purchased six portable drafting boards for the model shop for student use.
Having the ILT five days a week allows students to have a space outside of their studio class hours to work on their projects. In the near future we will need to replace our Epilog Laser Engravers and purchase replacement 3D printers.

Replacement of Graphic Reproduction Equipment
Two new large format HP Printer, Scanner and Copiers have been ordered to replace the 20 year old large format printers, scanner and copiers in the student print room.

Other successes we have accomplished this year:

High school outreach:
High school outreach with Hoover High school. The student diversity was made up of hispanic and asian students. Students observed a classroom CAD instruction, viewed our Student Show Exhibit, participated in a group project in building a card board chair (which they took home), and we brought in a former Hoover Highschool graduate who shared his journey to becoming an architect, attending CAL POLY SLO, study abroad in Fontainebleau France, graduate school at Columbia University Graduate School of Architecture, Planning and Preservation.

Student Exhibit:
An Exhibit of Student work produced at the Design Center, including Architecture and Interior design was put on display for high school students, families, students, administration and counseling. The exhibit occurred concurrently with the Hoover High School event so the HS student could see what we do in our programs, and hopefully encourage them to pursue a career in architecture.

Fieldtrips:
• Cross discipline student field trip to Los Angeles with the Art Department. Visited Los Angeles County Museum, The Broad Museum, MOCA and Disney Concert Hall. The activity created synergy between the two programs.
• Two fieldtrips to Arrive T1 – San Diego Airport, students experienced the project development in two phases.
  o This event included students from the Architecture, Interior design, Building Construction Technology programs and the Hospitality program.
  o Supported by Strong Workforce and the San Diego & Imperial Counties Community Colleges Regional Consortium. This group “transforms the way educators, industry, and community partners equitably advance economic mobility”.

Summary and Reflection

Faculty outreach events:
• Counseling-Presentation to the Counseling department. Presentation of the Architecture Program degrees, courses and the process to transferring to an Architecture University and Architecture licensure. We hoped to educate the counselors to better serve our students.
• The Architecture fulltime faculty participated in the Jumpstart Event, meeting high school students from various parts of the city.
• Faculty went to an outreach event at Madison Highschool to share with students what our architecture program can provide.
• CTE Networking Event at the Design Center – an open house event to educate other programs on what the architecture program is about.
• Strong workforce connected the architecture program with a public relations firm 3FOLD to help us with ideas on connecting with future students and build our student population.

Challenges:

Ongoing maintenance issues at the Design Center Buildings.
Problems with roofs leaking, gas leaks, air conditioning and heating issues, rotting doors, wood trim, exterior needs include painting, landscape maintenance, gravel in courtyard needs to be replaced with a more stable material. Interior water damage includes but, not limited to: damaged interior ceiling tiles, walls, cabinets, furniture and flooring.
**See Instructional Program Review dated 2018/19 (Comprehensive) for full documentation with photographs.

If applicable, describe any major curricular or service changes your unit has engaged in and the impact of those changes since the last comprehensive review.
Major curricular changes:
- Created new course Arch 113 Rhino
- A new fulltime hire in the Building Construction Technology department.

* Received approval and currently in the process of hiring a new Fulltime Faculty in architecture.

Impact:
- Transfer Universities are using this software program. Our students will be better prepared for transferring into architecture school.
- The new fulltime hire in BCT will be able to help run the Department, giving the architecture faculty some relief and time to focus on our courses and projects.

* The new fulltime hire in ARCH will allow contract faculty in Architecture to focus on research and completion of projects focusing on the 2030 Plan.

If applicable, describe the impact of any new resources (human, fiscal, etc) on the unit and/or action plan implementation.
New resources:
Hired an ILT for the Model shop.
*New contract hire in Building Construction Technology.
*New contract hire in Architecture.

Impact:
Allows the Model shop to be open 5 days a week.
Equity issue - giving students a place to work on projects outside of studio time.
*The Building Construction Technology contract hire is currently reworking the program and developing a much needed Construction Management program. This is an IN DEMAND job right now, and especially for female job seekers.
*The Architecture contract hire will give us the man power to investigate a Baccalaureate in Architecture, a revision in our degrees and certificates and pursue more articulation agreements with University Architecture programs.

If you assess OUTCOMES, please confirm that the outcomes have been reviewed for accuracy. If you do not assess Outcomes, skip this question.
Reviewed & Accurate

Related Documents for Charts and Graphs

Summary and Reflection

Executive Summary Complete
Yes

Data Reflection

Trends observed in program/service area's data.
Looking at data for the San Diego/Imperial Counties Community Colleges, from the COE (Centers of Excellence for Labor Market Research), dated March 30, 2023
https://coeccc.net/san-diego-imperial/2023/03/architecture-and-architectural-occupations/

Their brief provides labor market information about Architecture and Architectural Occupations to assist the San Diego and Imperial Counties Community Colleges with program development and strategic planning. They have found:

- Architecture and Architectural Technology is rated a Priority Program.
- San Diego County has a labor market demand of 260 annual jobs openings (while the average demand for a single occupation in San Diego County is 245 annual job openings).
- Eight institutions (in San Diego and Imperial County) supply 101 awards for Architecture and Architectural Occupations.
    - This shows a supply gap in the labor market.
- On average, entry-level and median wages are above the living wage.
- The expected education for Architecture and Architectural Technology is a Bachelor's Degree or Highschool Diploma or Equivalent.

COC recommendations:
Colleges in this region should proceed with developing a new program and supports a program modification because:

1. There is a supply gap in San Diego County.
2. Entry-level earnings for this occupation are above the living wage.
3. There is a medium number of annual job openings.

Reviewing our Mesa Data Dashboards:
Enrollment Management- Comparing Spring 2020, 2021, 2022 and 2023:

- Spring 2020 enrollment was at 510 (Prior to full pandemic mode)
- Spring 2021 enrollment dropped to 440,
- Spring 2022 enrollment continues to drops to 418.
- Spring 2023 it is up to 449 students.

Summary:
Moving our courses back on campus, we are slowly recovering our student population prior to the pandemic, which began in March of 2020.
Associate degree completion –

- 2020-21, 14 associate degrees,
- 2021-22, 15 associate degrees.

The majority of our students transfer to a University Architecture program and do not always complete their Associate Degree in Architecture.

Awards by Age
2021-22

- 18 – 24 (46.7%)
- 25-29 (26.7%)
- 30 – 39 (26.7%)

Awards by Gender
2021-22

- Female (26.7%)
- Male (73.3%)

Summary and Reflection

Awards by Ethnicity
2021-22
- Latinx (40.0%)
- White (20.0%)
- Unreported/Other (13.3% each)
- African American (6.7%)
- Filipino (6.7%)

Summary:
We have a growing Latinx population, but continue to have low representation of African American and Filipino students completing our program and degree awards.

Describe any equity gaps in the data. Are there differences and/or patterns observed by demographics (e.g.race/ethnicity, gender, age, etc.)
Looking at Equity-Gap data for the San Diego/Imperial Counties Community Colleges, from the COE (Centers of Excellence for Labor Market Research), dated February 1, 2023
https://coeccc.net/san-diego-imperial/2023/02/equity-gaps-in-priority-jobs-and-programs/

COC equity gap findings for the San Diego/Imperial Counties:
- Architectural and Civil Drafting jobs underrepresenting females, BIPOC, BIPOC Women, and are overrepresented with Ages 55+ (meaning possible retirements and job openings).
- Architecture and Architectural Technology programs are underrepresenting females, BIPOC, BIPOC women.
- Architecture and Architectural Technology Priority Programs in Community Colleges with Statistically Significant Under representation: Mira Costa, Palomar, Mesa, Southwestern.

Reviewing our Mesa Data Dashboards for the 2022 semesters:
- Equity Gaps for Student Characteristics- We had 823 Valid Enrollments broken down into 453 males (retention rate of 93.2% and success rate of 82.3%) and 370 females (91.6% retention rate and 84.9% success rate). An equity gap of -2.5% was listed for the male population.
    - Summary- although we have less women in the program, we are obtaining a greater success rate with the female population.
- Equity Gap Analysis by Ethnicity- Most dominant Equity gaps are found with Multi-Ethnicity/Other (46 students) at a -12.2% and Black/African American (37 students) at a -7.9%. Our greatest success rate can be found with our Asian students (87%) 77 enrollments, White students (84.7%) 213 enrollments, Latinx (83.8%) 394 enrollments and Filipino students (83.7%) 43 enrollments.

Summary:
The Equity Gap data we are finding at Mesa College, are matching what we are seeing in industry per the COC report.

Related Documents for Charts and Graphs

Describe the discussion(s) that took place about the unit's learning outcomes assessment data.
We use a minimum success rate of 70% for all participants receiving a grade. The majority of our courses use project-based assignments requiring in class participation, interaction with the instructor for feedback and preliminary class presentations and reviews. Students with poor attendance had the lowest success rates.

Data Reflection Complete
Yes

Practice Reflection

Describe current practices your program/service area has engaged in that you believe impact the above data trends and equity gaps.
Community outreach- Meeting with 3Fold Public relations, through Strong Work Force, to promote the Architecture Program

Summary and Reflection

What other factors (internal or external) might also impact the above data trends and equity gaps?
Legislative changes – New AFT contract allowing adjuncts to obtain healthcare benefits with a .40 FTE. This may encourage retention of adjunct faculty.
Hiring- Architecture program made the 2023 Hiring list for a new fulltime faculty.
*We are currently in the hiring process for a new contract faculty in Architecture.
Recruitment- Potential hire, Hoover High school instructor, to bridge the gap between our program and the high school programs.
*We have completed an agreement with SDUSD CTE Transitions credit by Exam.
*We hired a SDUSD instructor from the Hoover Highschool program to teach as an adjunct instructor. This may strengthen our connection to SDUSD students coming to San Diego Mesa College Architecture program.

Related Documents for Charts and Graphs

Practice Reflection Complete
Yes

Mid-Cycle Updates

YEAR 2 Updates (2023 - 2024)
Provide any edits or updates to the prompts originally documented in the Executive Summary section for Year 2.
Yes, see * items.

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 2.
no

Review Outcomes Report. Review the unit's outcomes assessment process for 2022 - 2023. Discuss connections to unit goals/action plans/resource requests.

Provide any edits or updates to the prompts originally documented in the Practice Reflection section for Year 2.
Yes, see * items.

YEAR 3 Updates (2024 - 2025)
Provide any edits or updates to the prompts originally documented in the Executive Summary section for Year 3.
Successes: New Assistant Professor of Architecture was hired; New photo equipment; New model shop equipment; new adjunct instructor for Rhino software, new large format printer plotters were installed.

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 3.
The January 2025 analysis of the labor market and educational data in the San Diego County region, according to the COE (Centers of Excellence for Labor Market Research) https://coeccc.net/san-diego-imperial/2024/12/priority-jobs-and-programs-addressing-equity-gaps-for-a-diverse-workforce/
The COE report identifies:
- Architectural and Civil Drafters as a priority job in San Diego County.

- Underrepresented by females at 23% of the labor force.
-25% of the Architectural and Civil Drafters are expected to retire in the next few years.
In the study, San Diego County's overall labor force is represented as follows: Priority Jobs with Equity Gaps by Demographic Groups available: Females 34; Males 16; Ages 55+ 22, BIPOC 22.
-At least 60 projected annual job openings between 2023 - 2028 in San Diego County;
-Pay at or above the living wage of $26.01 per hour for a single adult;
- Typically fewer than five years work experience at entry.

Reviewing the Mesa Data Dashboard for Architecture year 2023-2024:
AWARDS
Architecture Design 4
Architecture Technician 2
Architecture University Track 1
Female 57.1%

Male 42.9%

Review Outcomes Report. Review the unit's outcomes assessment process for 2023 - 2024. Discuss connections to unit goals/action plans/resource requests.
The CLO's assessed all met our target benchmarks. One course Arch 172 was on the low side of the benchmark at a 72% success rate. This is a design studio and we discussed breaking down the assignments into smaller "bites" for the students and increase the number of preliminary reviews, to increase confidence in the students motivation.

Provide any edits or updates to the prompts originally documented in the Practice Reflection section for Year 3.
Currently we are working with Strong Work Force to meet with a local architecture firm Steinberg-Hart to create a job shadowing for our students.
Updates-
-We successfully hired a full time Architecture faculty.
-We recruited and hired Hoover High school instructor, to bridge the gap between our program and the high school programs.
-We continue an agreement with SDUSD CTE Transitions credit by Exam.
-We are looking into creating a CCAP course with Hoover High school.

YEAR 4 Updates (2025 - 2026)

Provide any edits or updates to the prompts originally documented in the Executive Summary section for Year 4.
Success in attacking ongoing challenges regarding maintenance issues at the Design Center Buildings! A "re-fresh" refurbishment project will begin in Fall 2026, financed by the HH Bond. Many of the exterior items listed in the Executive summary will be addressed, but not all of the Interior needs. The water damaged tiles in the ceiling are not listed to be replaced.The proposed Landscape designs do not meet the needs of the student population by ignoring the need for shaded tables and seating for group interaction, and the introduction of toxic materials and plants into the outdoor spaces that are not good for people with breathing issues. It has been said their goal (the District) is to keep the current buildings in use for another 10 years.

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 4.
According to the COE (Center of Excellence for Labor Market Research) https://coeccc.net/data-tools/, projections of employment between 2024 – 2029, there will be an increase of 2.3 % – 3.4% need for Architects, Architectural and Engineering Managers and architectural and Civil Drafters in the San Diego and Imperial County.
Data continues to show an under representation of the female population in the architectural field. Looking at Table A: % of Occupation by Sex and % of Occupation by Race/Ethnicity in the COE data, the female population is currently documented at 33.5% of architects are female and 26.7% of the architectural drafters are female.
Race and ethnicity data shows the majority of people in the profession continues to be white at 58.2 % of architects and 45.6% architectural drafters. Areas of major deficiency are in the American Indian or Alaska Natives representing in the profession at 0.1% (architects) and Black/African Americans at 1.2% (architects) and 0.8% (drafters). The data shows Hispanic 14.6% (architects) and 21.2% (drafters) and Asian or Pacific Islander at 21.3% (architects) and 26.85 (drafters) following the whites in the architecture profession.
The COE reports 520 annual job openings in the San Diego and Imperial County Region for Architectural and Engineering Managers, Architects, and Architectural and Civil Drafters.

Reviewing the Mesa Data Dashboard for awards given to the Architecture program in year 2024 -2025:
Architectural Design 15
Architectural Technician 10
Architectural University Track 12
Construction Management 14

Review Outcomes Report. Review the unit's outcomes assessment process for 2024 - 2025. Discuss connections to unit goals/action plans/resource requests.
The courses CLO's we have assessed to date, have 100% met our target benchmark of 70%. Reviewing the 5 courses, Arch 100, Arch 101, Arch 141, Arch 170 and Arch 172 the average total is 83.1%. Course Arch 141 met the target benchmark 100% with the low percentage of 72.2% found in Arch 100 and Arc 172. Both of these courses are demanding studio classes requiring many exercises and projects exhibiting new skills taught in the courses. We have come to the conclusion that we must keep the class size at cap, and avoid going over cap so that the instructors have the time and energy to work with the students and increase one on one time with the students.

Summary and Reflection

Provide any edits or updates to the prompts originally documented in the Practice Reflection section for Year 4.
Positives & updates:
1) We are in the process of coordinating a "re-fresh and maintenance" project for our facility, the Design Center located in the Z-buildings. This project is being funded by the recent HH Bond. The Z-Buildings were originally constructed in the 1950's, a remodel to move the Architecture & Environmental Design Department into the buildings was completed in the early 2000's. We have been battling failures in the buildings for many years, and are now in the process of correcting those failures to keep us going for at least another 10 years.
2) We continue an agreement with SDUSD CTE Transition credit by Exam.
3) We continue outreach to high schools by visiting schools such as - San Diego High school; Madison High school; Mission bay High school and participating in our Jump start event every year.
4) Our new contract hire in Architecture has been reaching across campus, working with the the Exercise Science department on design projects. He has also brought in many of his contacts in industry to lecture to our student population. This is an important tool in widening our students viewpoints on what the professions can offer them. Opportunities for our students has grown with the new contract faculty we hired in architecture.
Other developments:
1) We learned our courses are not a good fit for CCAP courses in the high schools, mainly due to their "bell schedule" and the length our courses require for training and development of skills.
2) Our work with Strong Workforce and the Architecture firm Steinberg-Hart did not come to fruition, but we will continue searching for architecture firms to place our students.

YEAR 5 Updates (2026 - 2027)
Provide any edits or updates to the prompts originally documented in the Executive Summary section for Year 5.

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 5.

Review Outcomes Report. Review the unit's outcomes assessment process for 2025 - 2026. Discuss connections to unit goals/action plans/resource requests.
Provide any edits or updates to the prompts originally documented in the Practice Reflection section for Year 5.

Unit Goals, Action Plans, and Updates

Goal 1: Highschool outreach

Unit Goal: Goal 1: Highschool outreach

Goal Status: Completed

Beginning Year: 2022 - 2023

Projected Completion Year: 2023 - 2024

Mapping
Mesa College Strategic Plan: Roadmap to Mesa2030:

- **Completion - Objective 1:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements. (✓)
- **Completion - Objective 2:** Develop cross - functional teams that support student success and include integrated career and transfer counseling. (✓)
- **Completion - Objective 3:** Design and promote programs and services that intentionally target a reduction in equity gaps in completion outcomes (✓)
- **Completion - Objective 4:** Support students' access to resources to mitigate the impact caused by technological and basic needs insecurity (✓)
- **Pathways and Partnerships - Objective 2:** Expand partnerships with K-12 institutions to enhance program offerings and increase access for minoritized students. (✓)
- **Pathways and Partnerships - Objective 4:** Expand intersegmental pathways to create a seamless transition between Mesa and k-12, non-credit, Universities, and careers (✓)

Action Plans	Updates
Action Plan Status: Active **Action Plan:** Expand partnerships with K-12 institutions to enhance program offerings and increase access for minoritized students. In process- working on developing an agreement with SDUSD- articulation credit by exam for a CAD course. Mesa contacts are Cloris Johnson and Amertah Perman. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Submission Date**: 12/03/2023 **Action Plan Update**: We have completed an agreement with SDUSD, CTE TRANSITION CREDIT BY EXAM AGREEMENT. **Update Year**: 2023 - 2024 **Action Plan Progress**: Completed
Action Plan Status: Active	

Unit Goals, Action Plans, and Updates

Action Plans	Updates
Action Plan: Develop cross-functional teams. We are in contact with Andreanna Murphy and Donny Tenorio at K-12 Pathway, Career College and Technical Education at SDUSD for future Highschool student visits to the Design Center architecture program. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	

Goal 2: Revision to Degrees and create a Certificate

Unit Goal: Goal 2: Revision to Degrees and create a Certificate

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping
Mesa College Strategic Plan: Roadmap to Mesa2030:

- **Completion - Objective 1:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements. (✓)
- **Pathways and Partnerships - Objective 1:** Develop and implement frameworks to create communities that can provide more targeted delivery of educational resources and support services. (✓)
- **Pathways and Partnerships - Objective 3:** Increase community engagement, experiential learning, integrated career planning, and workforce training to prepare students for future careers (✓)
- **Pathways and Partnerships - Objective 5:** Develop and implement technologies, including website redesign, that will make pathways information available to students so that they can effectively utilize this information in their educational and career planning (✓)

Action Plans	Updates
Action Plan Status: Active **Action Plan:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements.	

Unit Goals, Action Plans, and Updates

Action Plans	Updates
Action Plan Cycle: 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	
Action Plan Status: Active **Action Plan:** Explore pathways to create a seamless transition between Mesa and Universities and careers. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	

Goal 3: Articulation agreements with architecture universities

Unit Goal: Goal 3: Articulation agreements with architecture universities

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030:

- **Completion - Objective 1:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements. (✓)
- **Pathways and Partnerships - Objective 5:** Develop and implement technologies, including website redesign, that will make pathways information available to students so that they can effectively utilize this information in their educational and career planning (✓)

Action Plans	Updates
Action Plan Status: Active **Action Plan:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements. We need to start by reviewing Assist.org and see what State and UC architecture programs are currently accepting from our program. Work with Dean Ly and Articulation officer Juliette Parker on how to implement changes.	

Unit Goals, Action Plans, and Updates

Action Plans	Updates
Action Plan Cycle: 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	
Action Plan Status: Active **Action Plan:** Develop and implement technologies, such as a website redesign, that will make pathways information available to students and their educational and career planning. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	