SAN DIEGO MESA COLLEGE

Program Review

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

Instructional Program - Geographic Information Systems (GISG)

Executive Summary

Describe the successes and challenges your unit has faced since the last comprehensive review.
SUCCESSES
Strong student success and retention history
GIS continues to have relatively high success rates, with an average success rate of 73% from 2018-2022. Over the same time period, our retention rate is 85%.
UPDATE 2023: 2022/23 Retention was 83%, improving average retention rate to 84%

Serving Skills Builders
GISG is a CTE program and attracts many people looking to make a career change, to be a more attractive job candidate with a GIS certification, or to brush up on skills to reenter the workforce. These "skills builders" push the average overall age of the GIS program older than many of Mesa's programs.
UPDATE 2023: 2022/2023 Career/Skills Builders remains a high percentage of GISG students, with 30.5%. Bachelor's Degree has increased to 36.4%. Almost 70% of GISG students are over the age of 25.

Student employment
Over the past 6 years, GISG students continue to find employment in the regional (and beyond) GIS industries. Students are employed at SDG&E, PanGIS, Michael Baker International, Quartic, City of San Diego, County of San Diego, Helix Environmental, Dudek, among others. Students that completed the program in 2018 have received promotions.
UPDATE 2023: Mesa continues to grow connections in the county for student employment. In the 2022 CTEOS, the very small sample of GIS graduates that responded are making an average of $38 an hour, well above a living wage.

Shift to remote learning
During the COVID remote learning period, faculty in the GISG program were well prepared to handle the shift to the online environment. Full-time and adjunct faculty participated in several professional learning activities related to course redesign including: HSI Stem Lab redesign grants for GISG 110, 130, and 131. Full-time faculty completed an @One course on Equity & Culturally Responsive Online Teaching. The lessons learned in these PL opportunities have been applied to both face-to-face and online modalities.
GISG worked with Work Based Learning and Career Center to shift offerings to prepare students to enter the job market. In Spring 2021, GISG offered a virtual career panel. Since the return to campus, we continue to offer Zoom options for guest speaker events to ensure a broader participation of our students.
UPDATE 2023: Full-time faculty (Russell) remains active in online learning professional development. She served as a facilitator for the Summer 2023 "Humanize" Cohort through the LOFT/MOST. GISG courses will transition to HyFlex format in Spring 2023.

Strong links to regional industry
GISG has many regional industry and workforce connections. This has allowed the program to reestablish and expand the Industry Advisory Committee. Our Committee works with faculty to identify
emerging industry needs and advise on course sequencing, necessary skills, and new graduate expectations. They also offer much needed feedback on software and hardware acquisitions. Many committee members started as internship site supervisors. Several are Mesa graduates.
UPDATE 2023: Mesa contract and adjunct faculty continue to be active in regional working groups and professional groups. Russell presented about Mesa College GIS at the San Diego Regional GIS Council's GIS day in November 2023.GISG participated in the portfolio show in Spring 2023. New industry partners attended the show and we continue to strengthen these connections.

CHALLENGES
Persistent equity gaps
Despite the efforts of faculty, equity gaps persist. In our previous comprehensive review, Black/African American success rate was 25% and a -46% equity gap. As of this review, the Black/African American success rate for 2018-22 was 46.4% with an equity gap of 27.9%. While there is improvement, the equity gap is still significant. In our previous comprehensive review

Summary and Reflection

Latinx success rate was 68% and equity gaps was -3%. Frustratingly, this review period's success rate was 68.4% but the equity gap increased to -7.3%.
UPDATE 2023: GISG small program size causes some equity data to be anonymized because results for values with less than 10 students are hidden, including the Black/African American students. Looking solely at 2022/23 data, the equity gap for Latinx students increased dramatically, to 16.1%. Latinx student success rate was only 66.7%. This is a worrying downward trend in success rates and equity gap for our Latinx students and must be addressed. Moreover, online/async success rates have decreased to 68.3% despite being 82% of our enrollment. This results in an -14.7% equity gap.

COVID
While GIS was able to pivot to remote successfully, students' experience outside of the classroom had a dramatic impact on their ability to perform in the classroom. Some students confided in significant mental and emotional strain and were unable to complete coursework, despite instructor and Mesa support. Success rates remained steady in 2020/21 academic year, but this reversed in 2021/22. COVID also highlighted the technology barriers many of our students face. Rental laptops provided a much-needed support system for GIS students. Additional technology improvements, such as remote desktop/Azure labs.

Students not completing program
Many students enter the GIS program with a BA/BS or higher degree and are at Mesa to build skills (ranges from 44% to 24% of student population). Our student population 18-24 was at its highest in 2020/21 at 26%. Although this data is not tracked, many students are employed full time in a related career, but need training on the GIS software. Or, they may gain employment during the program and pause classes and do not return. This is one reason for lower awards. Additionally, some students do not complete the Work Experience, therefore cannot apply for graduation.

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.
Conversion of Certificate Performance to Certificate of Achievement
The CA allows us to better track the number of degrees earned. Its increase of units to meet the requirements for Veteran's Education Benefits. Since this degree was added/updated, we've been able to track the number of students who earn a certificate, between 11 and 6 annually.

Updating A.S. Degree
In 2019 we added the requirement of GISG 104 to the major, this increased the units to 33-37. This introductory course is a gateway course into our program, but students weren't getting credit for the course in their degree path. We consistently have 2-5 students earn the A.S. each year.

Degree Path
GISG has worked with our department chair and dean to ensure we are maximizing student enrollment and students' educational goals.

Updated SLOs for GISG 270
To align with Mesa's Work Experience program, GISG updated the SLOs of our WE course. The new SLOs reflect the purpose and objectives of WE courses and the experience in a GIS internship/volunteer/other position.

Incorporated ZTC when possible
GISG Instructors have worked hard to remove textbook costs in as many courses as possible. Textbooks have been eliminated in 3 courses in the certificate program. One course has a low-cost textbook. Faculty have identified several OER resource textbooks to provide additional information for students. Faculty are working to develop ZTC materials to replace the existing textbooks.

UPDATES 2022/23
1. GISG has officially added CISC 179: Python Programming to the list of programming electives. This will be effective Fall 2024.
2. Russell received a district ZTC grant for GISG 104. In Spring 2024, GISG 104 will be a ZTC course.

Summary and Reflection

3. GISG updated the math recommended course to remove a course that is no longer offered.
4. GISG decided to no longer seek approval for the Remote Sensing certificate and degree.

If applicable, describe the impact of any new resources (human, fiscal, etc) on the unit and/or action plan implementation.
Mesa College/BARC has institutionalized funding for ESRI products that are required to run our courses. This eliminated the need for faculty to apply for Perkins funding annually. Additionally, the software can now be deployed across the campus regardless of discipline.

Since the last comprehensive review, GIS has received funding to procure Android tablets, iPads, and GNSS receivers. These are used in multiple classes to support the teaching/learning of Web App development, GPS data collection, and ground truthing. We created a classroom library to alleviate textbook costs. This was popular from 2019-2020, but its use decreased due to COVID and technology changes. Books are still available for student use.

Through support of Perkins and other funding sources, faculty were able to complete online teaching professional learning. This training was essential during the COVID shift to remote learning.

UPDATES 2022/2023: N/a

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

Executive Summary Complete
Yes

Data Reflection

Trends observed in program/service area's data.
Headcount in GIS has remained relatively steady since 2018, ranging from 160 to 176.

GIS continues to have relatively high success rates, with an average success rate of 73% from 2018-2022. Our success rate for Online-Asynchronous courses is 69%. Over the same time period, our retention rate is 85%. The 2021/22 academic year brought a noticeable drop in success rates, from 75 to 69%. There is a drop in success rates across campus during this academic year as well, but not as large of a drop.

From 2018-2022, there were 37 Certificates earned and 12 AS degrees. The number of degrees dipped in 2021, which we believe is a reflection of the COVID-19 pandemic. While GIS was able to pivot to remote learning, some students struggled with the shift. Additionally, internships were a challenge as it took some time for companies to open remote internships or for hybrid positions to open.

GIS continues to have successful employment of graduates and current students, although this data is difficult to track.

UPDATES 2022/23
- Headcount was down to 105.
- Success Rate was 76% for all courses, only 68% for Online-Asynch courses.
- Retention was 78%
- Degrees: 2 AS and 5 Certificates. These numbers seem low, and GISG will work with Evaluations to ensure students who complete the program are applying for graduation.

UPDATES 2022/23

- Headcount rose to 135.
- Success rate was 71% for all courses, only 61% for Online-Asynch courses
- Retention was 92%

Summary and Reflection

- Degrees: 4 AS and 4 Certificates

Describe any equity gaps in the data. Are there differences and/or patterns observed by demographics (e.g.race/ethnicity, gender, age, etc.)

There are several equity challenges that remain in the GIS program.

Ethnicity data

- Black/African American students continue to have a low success rate of 45.8% with a -29% equity gap. The valid enrollments of this group of students is 31 over the last 6 years. This makes it challenging to dig into individual courses and sections to identify places for change. This is disappointing after the improvements to 54% success rates during the Covid period.
- Latinx students have a success rate of 68% and an equity gap of -6.6%. While this success rate is still below the Mesa average, this is an increase from the previous 65% average.

Age data

- 18-24 year old students have a success rate of 69.1% and an equity gap of -5.7%. It appears that in GISG 104 and 110 these students have success rates over 70%, but starting in GISG 111 the success rates (and enrollments) fall. This could be due to these students transferring successfully or the approachability of the material and time of classes. This is an area that needs further investigation.

First generation status

- First generation students have a success rate of 63.5% and an equity gap of -11.8%.

UPDATES 2022/23

Ethnicity: GISG small program size causes some equity data to be anonymized because results for values with less than 10 students are hidden, including the Black/African American students. Looking solely at 2022/23 data, the equity gap for Latinx students increased dramatically, to 16.1%. Latinx student success rate was only 66.7%. This is a worrying downward trend in success rates and equity gap for our Latinx students and must be addressed.
Modality: Online/async success rates have decreased to 68.3% despite being 82% of our enrollment. This results in an -14.7% equity gap.
Age: No equity gaps persist in age data.
First Gen: No equity gaps persist in age data.

UPDATES 2023/24

Ethnicity: GISG small program size causes some equity data to be anonymized because results for values with less than 10 students are hidden, including the Black/African American students. Looking solely at 2023/24 data, the equity gap for Latinx students decreased slightly, to 15.9%. Latinx student success rate decreased to a new low of 59.7%.
Modality: Online/async success rates have decreased again to 60.9%, even though it represents a smaller portion of our enrollment at 53.74%. This results in an -20.9% equity gap.
Age: Ages 30-39 have a 60% success rate, which represents a 13.9% equity gap. Upon further inspection of the data, the equity gap is eliminated when GISG 131 is removed from the sample.
First generation status: No equity gaps present

Related Documents for Charts and Graphs

Describe the discussion(s) that took place about the unit's learning outcomes assessment data.

Discuss outcomes at semester department meetings.
GISG and Digital Technology continue to stress the importance of project-based assessments of outcomes. We discussed the need to add more scaffolding/guided exercises before students get to their independent work. Another focus is on decreasing our reliance on traditional textbooks and an interest in using OER or designing our own projects/assignments. We generally meet our benchmark of 70% students passing/earning passing grade on assignment, etc.
We are all continually updating our assignments to meet industry needs, and better prepare students.

Summary and Reflection

We have reviewed and updated our outcomes when necessary.

UPDATES 2022/23
GISG and Digital Technology continue to stress the importance of project-based assessments of outcomes. In 2022/23 we updated or affirmed our CLOs and PLOs. This year GISG will assess outcomes related to technological skills.

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.
-The full-time faculty continues to seek out additional professional learning on- and off- campus related to online teaching (Humanizing STEM, Equity & culturally responsive online teaching, Assess). Many of these trainings can be applied to face-to-face modalities as well. Adjunct faculty are offered the same opportunities.

-Faculty continues to work with the department chair and dean to improve course scheduling and offerings to maximize enrollments.

-GISG seeks input from Industry Advisory Committee on community outreach and supporting non-traditional students. Faculty attend regional meetings and industry meetings to promote the program, and support students attending and presenting at these meetings.

-GISG faculty are involved in campus wide discussions on Azure labs/remote desktop to allow for students to access software from their home devices.

-Faculty seek out a diverse representation of GIS professionals for guest lecturers and advisory committee members.

What other factors (internal or external) might also impact the above data trends and equity gaps?
GISG saw some minor gains in student success, equity gaps, and online modality performance. However, these seem to be erased by the 2021-22 academic year. The cause for this is unknown, but may be impacted by the full-time faculty being on maternity leave. More likely students were experiencing new challenges as the remote learning period was coming to an end and obligations outside of the classroom changed.

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.
See above

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 2.
See above

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.
Not at this time

Summary and Reflection

YEAR 3 Updates (2024 - 2025)

Provide any edits or updates to the prompts originally documented in the Executive Summary section for Year 3.

SUCCESSES
Headcount increased to 135.
Success rate remains high at 71%
Retention improved to 92%

Student educational goals changing
- For the first time, Student educational goal has shifted to 58.5% Bachelor's degree. When isolating adult learners 25+, the Bachelor's degree career goal remains high at 52.3%. Career/Skills Builder now only represents 12.6%. When added with Adult Education and Lifelong Learning, this percentage only increases to about 19%. However, over 77% of students are attending Mesa Part-Time versus full time. This trend is worth exploring in more detail!

Hyflex introduction
In Spring 2024 and Fall 2024 GISG introduced HyFlex modality to 4 of its courses. This has allowed students located outside of San Diego County to attend regularly and have live interaction with faculty. Faculty will assess CLOs and success rates when data are available. Beginning in Fall 2024, student enrollment in GISG 110 and 111 have increased from the previous fall. In 2023/24 77% of enrollments were in online courses. 13.3% were in Hyflex courses.

CHALLENGES
Fraudulent enrollments presented a challenge for the program, in particular in late-start 8-week courses GISG 130 and 131. The short nature of drop and W period in these courses allowed for some fraudulent enrollments to be missed. In Fall 2023, this oversight contributed a low success rate of 52% for this course which had ripple effects when looking at the program as a whole. This class was one of the few that reported the assessed outcomes were unmet. If GISG 131 is removed from the analysis, overall success rate is 71.2% and there are no significant equity gaps for ethnicity. Equity gaps remain for online asynch even if GIS G131 is removed.

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 3.

Trends:
- Headcount rose to 135.
- Success dropped slightly to 71% for all courses, only 61% for Online-Asynch courses
- Retention was 92%
- Degrees: 4 AS and 4 Certificates

Equity
- Ethnicity: GISG small program size causes some equity data to be anonymized because results for values with less than 10 students are hidden, including the Black/African American students. Looking solely at 2023/24 data, the equity gap for Latinx students decreased slightly, to 15.9%. Latinx student success rate decreased to 59.7%.
- Modality: Online/async success rates have decreased again to 60.9%, even though it represents a smaller portion of our enrollment at 53.74%. This results in an -20.9% equity gap.
- Age: Ages 30-39 have a 60% success rate, which represents a 13.9% equity gap. Upon further inspection of the data, the equity gap is eliminated when GISG 131 is removed from the sample.
- Gender: Male students have a 66% success rate and an 11.1% Equity gap.
- First Gen: No Equity gaps exist.

Review Outcomes Report. Review the unit's outcomes assessment process for 2023 - 2024. Discuss connections to unit goals/action plans/resource requests.

GIS faculty lead is the Digital Technology department outcomes coordinator. The unit as a whole continues to evaluate course & program outcomes at the Spring Department meetings. We as a department and as individual programs regularly assess outcomes and update curriculum to reflect the needs of our industry advisory boards. Faculty have worked with on-campus resources to reduce equity gaps in our classes. Faculty share successes and lessons learned in incorporating ZTC materials. After successful HyFlex courses in MULT, MULT faculty shared effective practices to increase student engagement and success rates. Faculty are encouraged to participate in professional learning focused on equitable teaching strategies. A challenge for GIS and Digital Technology is getting adjuncts to complete outcomes assessment, program leads were asked to reach out to adjunct faculty in their areas. Additionally, Rachel sent around more frequent reminders about Outcomes Assessment throughout the semester.

Summary and Reflection

Provide any edits or updates to the prompts originally documented in the Practice Reflection section for Year 3.
n/a

YEAR 4 Updates (2025 - 2026)

Provide any edits or updates to the prompts originally documented in the Executive Summary section for Year 4.
SUCCESSES
- Headcount increased again.
• Course Success Rate Increase in SP25: The Course Success Rate improved significantly in the spring term, rising to 75.4% in Spring 2025 (SP25). This is an increase from the 69.9% success rate recorded in Fall 2024 (FA24).
•High Completion and GPA: The Course Completion Rate was 83.9% in FA24 and increased to 90.5% in SP25. Course GPA remained high, averaging 3.12 in FA24 and 3.28 GPA in SP25
• Equity Performance in Completion: Many disproportionately impacted groups achieved positive equity gaps in Course Completion Rate during the 2024/25 academic year, including Latine Male (93.6% rate, 7.6% gap) and Multi-Ethnicity Female (100.0% rate, 13.2% gap)
- HyFlex Implementation: The program remains on track, with HyFlex classes piloted in Spring 2024, and Fall 2024 serving as the first cohort going through the program with HyFlex options. By October 2025, GISG 110, 111, 112, and 113 were taught only in HyFlex modality, and success rates remain high.

CHALLENGES
Emerging Equity Gaps in Completion Rate: A negative equity gap was identified for White Female students in the Course Completion Rate (CCR) metric for 2024/25, with a rate of 79.7% and a gap of -9.7%, requiring 6 additional students to close the gap.
Minor Equity Gaps in Success Rate: Minor negative equity gaps in Course Success Rate (2024/25) were noted for Asian Female students (-0.5% gap, 1 additional student needed) and White Female students (-0.4% gap, 1 additional student needed).

Provide any edits or updates to the prompts originally documented in the Data Reflection section for Year 4.
TRENDS
Headcount rose to in FA24: 100 SP24:80
Success rate for online only courses increased slightly to 62.1%. Hyflex success rates are at 80.2%
Awards dashboard has changed.

EQUITY
- Ethnicity: GISG small program size causes some equity data to be anonymized because results for values with less than 10 students are hidden. Looking solely at 2024/25 data, the equity gap for Latinx students decreased slightly, to 9.9%. Latinx student success rate increased to 79.6%.
- Modality: Online/async success rates have increased slightly to 62.1%,.
- Age: Ages 40-49 have a 47.1% success rate, which represents a 27.8% equity gap.
- Gender: Male students success rate increased to 72.8% and equity gap decreased to 0.7%.
- First Gen: First Gen success rate was 65.1%, with an equity gap of -10.5%

Review Outcomes Report. Review the unit's outcomes assessment process for 2024 - 2025. 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 4.
-The full-time faculty continues to seek out additional professional learning on- and off- campus related to online teaching, adult learners, and GIS.
-Faculty continues to work with the department chair and dean to improve course scheduling and offerings to maximize enrollments.
-GISG seeks input from Industry Advisory Committee on community outreach and supporting non-traditional students. Faculty attend regional meetings and industry meetings to promote the program, and support students attending and presenting at these meetings.
-Faculty seek out a diverse representation of GIS professionals for guest lecturers and advisory committee members.

GISG saw some gains in student success, equity gaps, and online modality performance.

Summary and Reflection

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: Update curriculum and coursework

Unit Goal: Goal 1: Update curriculum and coursework with the guidance of the advisory committee to reflect industry trends and needs to prepare students for the workforce/transfer and facilitate degree completion.

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. (✓)
- **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 1:** Develop and implement frameworks to create communities that can provide more targeted delivery of educational resources and support services. (✓)
- **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 3:** Increase community engagement, experiential learning, integrated career planning, and workforce training to prepare students for future careers (✓)
- **Pathways and Partnerships - Objective 4:** Expand intersegmental pathways to create a seamless transition between Mesa and k-12, non-credit, Universities, and careers (✓)
- **Scholarship - Objective 3:** Assess impact of prerequisites and corequisites on student success and revise curriculum, as needed (✓)
- **Stewardship - Objective 3:** Increase student access and schedule efficiency by coordinating schedules among departments/disciplines (✓)

Action Plans	Updates
Action Plan Status: Active **Action Plan:** Evaluate course outlines of record to identify areas that can be improved.	**Submission Date**: 10/08/2025

Unit Goals, Action Plans, and Updates

Action Plans	Updates
Action Plan Cycle: 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Action Plan Update**: GISG 110, 111, 112, 114 were updated with Curriculum Committee. GISG 113 COR has been drafted. Working with advisory committee determine how much of course should be changed, OR if we need a new course number. **Update Year**: 2025 - 2026 **Action Plan Progress**: On Track
	Submission Date: 11/18/2024 **Action Plan Update**: Work continues to updated curriculum with advisory committee. **Update Year**: 2024 - 2025 **Action Plan Progress**: On Track
	Submission Date: 10/27/2023 **Action Plan Update**: This goal is active and ongoing. Working with Curriculum to remove deactivate prerequisites. **Update Year**: 2023 - 2024 **Action Plan Progress**: On Track
Action Plan Status: Active **Action Plan:** Evaluate annually course offerings and scheduling of classes, assess time to completion. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Submission Date**: 10/08/2025 **Action Plan Update**: Each semester, program works with department chair and dean to adjust course offerings. **Update Year**: 2025 - 2026 **Action Plan Progress**: On Track
	Submission Date: 11/18/2024 **Action Plan Update**: Evaluate annual to assess course outcomes. **Update Year**: 2024 - 2025 **Action Plan Progress**: On Track
	Submission Date: 10/27/2023 **Action Plan Update**: Every semester faculty works with department chair to assess scheduling. **Update Year**: 2023 - 2024 **Action Plan Progress**: On Track

Goal 2 Equity

Unit Goal: Goal 2: Develop and implement plans to address technology equity gaps and ensure student success, particularly among disproportionality impacted students.

Goal Status: Active

Beginning Year: 2022 - 2023

Unit Goals, Action Plans, and Updates

Projected Completion Year: 2025 - 2026

Mapping
Mesa College Strategic Plan: Roadmap to Mesa2030:

- **Community - Objective 2:** Develop activities, spaces, and programs that support a sense of belonging with a focus on antiracism, historically minoritized groups, and inclusion. (✓)
- **Completion - Objective 1:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements. (✓)
- **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 1:** Develop and implement frameworks to create communities that can provide more targeted delivery of educational resources and support services. (✓)
- **Scholarship - Objective 1:** Expand and prioritize professional learning experiences for all employees that create parity in outcomes across racial/ethnic groups and all disproportionately impacted groups (✓)
- **Scholarship - Objective 2:** Evaluate and improve Diversity, Equity, and Inclusion practice in classroom environments, campus activities, departments, schools, and administrative units (✓)
- **Scholarship - Objective 4:** Expand the use of innovative and high-quality teaching, learning, and support practices that achieve equitable outcomes and increase student success (✓)
- **Stewardship - Objective 4:** Establish a college-wide practice and schedule that addresses routine maintenance and renewal of equipment, facilities and technology to ensure access to adequate resources and better serve students (✓)

Action Plans	Updates
Action Plan Status: Active **Action Plan:** Work with CTS and ICT faculty to deploy the Azure cloud environment to reduce the need for students to have high-end hardware outside of the classroom **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Submission Date**: 10/08/2025 **Action Plan Update**: Campus and District ICT are unable to support Azure labs. Instead, I have obtained 8 laptops from grants and am renting those out to students. **Update Year**: 2025 - 2026 **Action Plan Progress**: Barriers Encountered **Submission Date**: 11/18/2024 **Action Plan Update**: Azure Labs is sunsetting in 2026. Limited capacity for college technology service to manage and support Azure labs for one class. New ideas need to be generated. **Update Year**: 2024 - 2025 **Action Plan Progress**: Barriers Encountered **Submission Date**: 10/27/2023

Unit Goals, Action Plans, and Updates

Action Plans	Updates
	Action Plan Update: Ongoing. Continuing to work with CTS and district, but barriers encountered with inexperience using Azure, licensing issues, etc. **Update Year**: 2023 - 2024 **Action Plan Progress**: Barriers Encountered
Action Plan Status: Active **Action Plan:** Evaluate Hy-flex course modality options and its effectiveness for GIS. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Submission Date**: 10/08/2025 **Action Plan Update**: GISG 110, 111, 112, 113 are now taught only in HyFlex! This modality allows students to attend in person or online, depending on their circumstances. Students are able to attend to their home obligations, travel for work obligations, etc. Success rates remain high. **Update Year**: 2025 - 2026 **Action Plan Progress**: Completed
	Submission Date: 11/18/2024 **Action Plan Update**: Hyflex classes piloted in Spring 2024, Fall 2024 will be first cohort going through program with HyFlex options. **Update Year**: 2024 - 2025 **Action Plan Progress**: On Track
	Submission Date: 10/27/2023 **Action Plan Update**: Hyflex courses will be piloted in Spring 2024. **Update Year**: 2023 - 2024 **Action Plan Progress**: On Track

Goal 3: ZTC

Unit Goal: Goal 3: Develop and deploy zero-cost culturally-relevant lab experiences across the program to address equity gap.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030:

- **Community - Objective 2:** Develop activities, spaces, and programs that support a sense of belonging with a focus on antiracism, historically minoritized groups, and inclusion. (✓)
- **Community - Objective 4:** Remove barriers to equitable participation by developing, incentivizing and creating structures for all employees to engage in and design professional learning (✓)

Unit Goals, Action Plans, and Updates

- **Completion - Objective 1:** Develop pathways that provide students with clarity about degree, certificate, and transfer requirements. (✓)
- **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 (✓)
- **Scholarship - Objective 1:** Expand and prioritize professional learning experiences for all employees that create parity in outcomes across racial/ethnic groups and all disproportionately impacted groups (✓)
- **Scholarship - Objective 2:** Evaluate and improve Diversity, Equity, and Inclusion practice in classroom environments, campus activities, departments, schools, and administrative units (✓)
- **Scholarship - Objective 4:** Expand the use of innovative and high-quality teaching, learning, and support practices that achieve equitable outcomes and increase student success (✓)
- **Scholarship - Objective 5:** Reduce costs associated with instructional materials to support the elimination of equity gaps (✓)

Action Plans	Updates
Action Plan Status: Active **Action Plan:** Create lab materials for that incorporate more programming in open-source GIS software. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Submission Date**: 10/08/2025 **Action Plan Update**: ZTC GISG 104 is standard at Mesa. Pre change Fall 2023 Success Rate: 65.8%, Fall 2024 65%, Spring 2025 66.7% **Update Year**: 2025 - 2026 **Action Plan Progress**: Completed **Submission Date**: 11/18/2024 **Action Plan Update**: ZTC GISG 104 launched in Spring 2024. Success rate was 62% which was a slight improvement over the previous Fall 2024. Revisions made for Fall 2025 course. **Update Year**: 2024 - 2025 **Action Plan Progress**: On Track **Submission Date**: 10/27/2023 **Action Plan Update**: Rachel received district ZTC grant for GISG 104. **Update Year**: 2023 - 2024 **Action Plan Progress**: On Track
Action Plan Status: Active **Action Plan:** Assess the effectiveness of materials through student surveys on experiences and review of student success data. **Action Plan Cycle:** 2025 - 2026, 2024 - 2025, 2023 - 2024, 2022 - 2023	**Submission Date**: 10/08/2025 **Action Plan Update**: Surveys used in 104 to support student experience and student success. **Update Year**: 2025 - 2026 **Action Plan Progress**: On Track **Submission Date**: 11/18/2024

Unit Goals, Action Plans, and Updates

Action Plans	Updates
	Action Plan Update: GISG 104 material launched in Spring 2024 contains multiple opportunities for feedback from students and is being incorporated into Fall 2024. **Update Year**: 2024 - 2025 **Action Plan Progress**: On Track
	Submission Date: 10/27/2023 **Action Plan Update**: Some new OER material created and deployed in GISG 104 and 130. Surveys/Feedback offered. **Update Year**: 2023 - 2024 **Action Plan Progress**: On Track