

SAN DIEGO  
MESA COLLEGE



# Program Review

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

Instructional Program - Web Development (WEBD)

### Executive Summary

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

Successes: During the pandemic I believe the quality of our program adapted well because our faculty had been teaching online for several years.

Although the portfolio show was canceled in 2021 it resumed in 2022 with moderate success. The foot traffic was light for the event but that may have been because of continued Covid protocols in place at the door. We were able to create connections with a few new employers who later came back to hire a few of our students. The 2023 portfolio show is set to run in this May with no limitations on guests.

In the Spring of 2023 web development scheduled its first hy-flex courses. Both are upper division courses late in the program. This has been very experimental, but vital to the overall survival of the program. I would consider it a success so far based on the quality of work submitted. I do see the students making an effort to have as much contact as possible. We have a student who is living in Puerto Rico for example who has made every effort to attend as much as possible and interact with his peers. I'm sure the hy-flex model will grow in popularity among similar CTE programs. Hopefully by the next program review we'll have data to analyze.

Challenges: Our enrollment had a slight decline as we had 255 students in the spring of 2020 and it went down to 231 in the spring of 2023. Our fill rate declined from 61% to 53% over that period.

Enrollment challenges have caused us to change our scheduling by canceling courses often late. This causes frustration for both faculty and student. In response created a schedule where the higher level courses are offered only once per year. While this increases our fill rate, it affects our student population adversely. This in turn affects our persistence rates

#### UPDATE

In the fall of 2023 we ran two hyflex courses with moderate success. The courses, Webd 164 (intro to JavaScript) and Webd 167 (Web Databases) ran on Tuesday and Thursday evenings from 6pm to 9pm respectively. The Web Databases course had a fervent response from students. I was very impressed with both the attendance and participation. The JavaScript course however lacked participation period I believe this is because the students in the web database course are further along in the program they believe in the course direction that they are headed and are anxious to get into the industry period many of the JavaScript students seems to be overwhelmed with the challenging course content. I do not believe that this is due to a lack of preparation from the entry-level classes. It is been my experience that students new to the field will often get overwhelmed the first time they are asked to program the entry level courses are simply markup and involve no programming. There are a few ways to address this dilemma period first having the adjuncts who teach web d152 which is the preceding class take a moment to explain exactly what JavaScript is and what they'll be taking would ensure that they're excited to take the next course is getting a tutor for what d164 who specializes in JavaScript especially because JavaScript is utilized in all the upper division courses. We also need to be more vigilant in educating students on the advisories for each course. Personally, I need to address that in week one of the class so that no student feels underprepared or out of place.

**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.**

This past year we have had several changes to our curriculum. A subtle change that will make the most difference is changing the course number of Webd 127 to Webd 154. In the past both students and counselors like believed that Web D127 (Creating User-Centered Content) should be the first course that is taken for our certificate and

## Summary and Reflection

degree programs. However this course requires a website to be built by students. We made the change so that the course would follow Webd 152 and would have the skills needed to complete the project. This should help our persistence rates in both courses.

Another change was to switch the Multi 121 requirement to Multi 100.

Because the latter provides an adequate overview of the image manipulation skills necessary for web design and development, our students should be less intimidated by the course whereas multi 121 provides a more comprehensive overview of image manipulation.

The students can still take multi 121 if they decide to follow a more design-oriented career path.

Another change made on the faculty side this year was to hire Bryan Monzon to teach Webd169. Brian has been teaching similar content at UCSD for several years now and brings a fresh and professional perspective to our crew. It has been nice to have a working professional who specializes in WordPress to teach that course. WordPress runs 65% of the content management systems in existence (<https://w3techs.com/technologies/details/cm-wordpress>). It is also an area in high demand for our employers in the field.

### UPDATE

We have made no new curriculum changes in the past 6 months since the last program review. We have brought on two new part time faculty members. Doug Saisho will be teaching Webd 152 if there is enough enrollment and Max Morgan will be teaching Webd 164. Both are energetic passionate developers with some teaching experience, but more importantly a love of the craft. I believe placing these young professionals in the entry level classes will facilitate our persistence.

### **If applicable, describe the impact of any new resources (human, fiscal, etc) on the unit and/or action plan implementation.**

Well this applies to several programs we were able to receive \$4000 to allocate towards our portfolio show initiative. We were also able to receive a \$500 stipend for signage and refreshments for the show.

Although it cost us no extra money, the aforementioned hiring of Bryan Monzon has had a positive impact on our action plan to get students hired. He has a lot of connections in the industry having works for fiftyandfifty.org and as a young working professional can connect with both our younger audiences and employers.

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

Reviewed Not Accurate - Update In Progress

### **Related Documents for Charts and Graphs**

### **Executive Summary Complete**

Yes

## Data Reflection

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### **Trends observed in program/service area's data.**

Enrollment Trends:

Our current enrollment is 231 students in 11 sections for spring 2023. We have a capacity of 440 students which leaves us at 53%.

If we consider the fall of 2022 as the first semester without Covid restrictions then our trend is on the upswing. In fall 2022 our enrollment was 205 students spread across 8 sections. Our fill rate was 64% in the fall, but we did lose some students because we cancelled two upper division courses before the semester started.

## Summary and Reflection

Course Success: Our course success rates for the last year overall was .59. Of concern was our success rates for Black students which was only .11. This may have been due to our very low sample size in the program which was 19 students.

Of note is that two of the courses I teach have a success rate of .42. These are Webd 164 (JavaScript) and Webd 173 (eCommerce). These are two of the most challenging courses in the curriculum which may have a correlation, but this will be placed in the goal section of this document. Of note, in the FA21 semester, those same courses scored a .60 and .57 respectively, but this will be watched.

Retention: Since our last program review our retention is 76.9% and our success rate was 64.9%. Unfortunately our black students had only a 30.6% success rate and a 47.2% retention rate.

Degree completion: Since our last program review, our award distribution has been the following:

Foundations Certificate: 1

Certificate of Achievement: 4

Associates Degree: 13

Worth noting is the fact that this program often has students who will select one or two courses to get what they need career wise without intending to complete an award program.

Transfer Rates: Generally, being a CTE program, students do not enroll in the Web Development program intending to transfer. They are here as a career choice.

Employment: Although the percentage of students who have enrolled and been able to find employment is not available, we can get a glimpse from my linked in account of students who have kept in touch in the last 6 years since my hiring. If we look at that, there are at least 40 students working in the industry.

Labor Market Analysis:

Overall employment of web developers and digital designers is projected to grow 23 percent from 2023 to 2031, much faster than the average for all occupations according to the US Bureau of Labor statistics.

About 21,800 openings for web developers and digital designers are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as retiring. Additionally, California has the most Web Development jobs of any state with almost 9000 jobs at a median wage of a 104,000.

([https://www.bls.gov/oes/current/oes\\_ca.htm](https://www.bls.gov/oes/current/oes_ca.htm))

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

The only group that has an equity gap in the Web Development program are Black/African Americans. When looking at the Fall 2021/Spring 2022 data, this group holds a -36.1% equity gap. The success rate was 30% for that period while the average success rate across the program was 66%. There were 19 enrollments for 11 students. The retention rate for this group was a low 47%. Success rates for all other retention rates for all other groups are positive.

Update

Because the data above was 6 months ago, we only have the Fall 22 data to add to our assessment. During the fall 2022, 0 African-Americans were enrolled according to the data warehouse.

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

In talks with Carlos Toth on this, but did not want to hold up the process.

**Related Documents for Charts and Graphs**

**Data Reflection Complete**

Yes

## Summary and Reflection

### Practice Reflection

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**Describe current practices your program/service area has engaged in that you believe impact the above data trends and equity gaps.**

The web development department has taken an active approach to combat socio-economic inequalities in each of its courses. Each class that requires that a web server be used not only allows students to use free servers, but teaches them what is available for free and the differences between the options available. Additionally students are coached on where to find free software in each course. For example, we use sublime which is a free text editor and filezilla which is a free FTP client (For putting files up on a server). We also use Mamp/Xampp which are free local servers. Basically, we do everything possible to make sure that students know what free digital resources are available to them.

**What other factors (internal or external) might also impact the above data trends and equity gaps?**

The equity gap for African-Americans is disturbing despite the small number of students. Due to the online nature of this program, we cannot tell which of our online students fit that criteria. Our only solution is to take the initiative and reach out to struggling students regardless of what group they belong to.

**Related Documents for Charts and Graphs**

**Practice Reflection Complete**

Yes

### Mid-Cycle Updates

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**Are there any edits or updates to the Executive Summary above?**

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**Are there any edits or updates to the Data Reflection above?**

Because the data above was 6 months ago, we only have the Fall 22 data to add to our assessment. During the fall 2022, 0 African-Americans were enrolled according to the data warehouse.

## Summary and Reflection

Are there any edits or updates to the Practice Reflection above?

## Summary and Reflection

### Goal 1: Improve retention in WEBD 164 and 173 by 10% by the 24-25 academic year by introducing tutoring.

**Unit Goal:** Goal 1: Improve retention in WEBD 164 and 173 by 10% by the 24-25 academic year by introducing tutoring.

**Goal Status:** Active

**Beginning Year:** 2022 - 2023

**Projected Completion Year:** 2025 - 2026

#### Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Scholarship - Objective 3: X
- Scholarship - Objective 4: X

Action Plans	Action Plan Update
<p><b>Action Plan Status:</b> Active</p> <p><b>Action Plan:</b> Work with Tutoring to get a specialized tutor. We do have tutors to handle Web Development. Unfortunately we have yet to get one who knows the more complicated subject matter like JavaScript or eCommerce.</p> <p><b>Action Plan Cycle:</b> 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	<p><b>Submission Date:</b> 12/03/2023</p> <p><b>Action Plan Update:</b> Webd 173 was not offered in the fall, 2023 because of low enrollment. We are working on getting a tutor in place for the Spring semester not only for Webd 173, but also Webd 166 and Webd 167 as all three courses utilize the programming language PHP.</p> <p>We had a potential tutor volunteer, but was unwilling to take Education 100. This challenge has been two fold. First, by the time we find a student with the qualification we need to tutor the more challenging courses, they are nearing graduation and usually already working. Second, they are often too busy or fail to see the value in taking Education 100. By the time they've taken it, they've usually already graduated.</p> <p><b>Update Year:</b> 2023 - 2024</p> <p><b>Action Plan Progress:</b> On Track</p>

### Goal 2: Improve course success for marginalized groups like African Americans who show an equity gap.

**Unit Goal:** Goal 2: Improve course success for marginalized groups like African Americans who show an equity gap.

**Goal Status:** Active

**Beginning Year:** 2022 - 2023

**Projected Completion Year:** 2025 - 2026

#### Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Completion - Objective 3: X
- Completion - Objective 4: X

Action Plans	Action Plan Update
<p><b>Action Plan Status:</b> Active</p>	

## Summary and Reflection

Action Plans	Action Plan Update
<p><b>Action Plan:</b> We need to maintain a strict policy that if a student hasn't logged on to a course in more than 4 days, we reach out to them directly. I personally am reducing my policy which used to be 7 days, down to 4.</p> <p><b>Action Plan Cycle:</b> 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	