Assessment Report

Yuba Community College District

YC - MESA Program Recommendations

Year of Review: 2013-2014

Type of Review: Annual Update

Executive Summary (Include a list of team members): The Math, Engineering, and Science Achievement (MESA) Program is designed to support underrepresented student populations as they work towards a degree in a field of science, technology, engineering and/or mathematics (STEM). The program provides tutoring, mentoring, study groups, counseling, university and career exploration, study space, and leadership development to students.

The MESA Program at Yuba College has faced large budget cuts in the past 3 years. In spite of the adversity the program has survived and continues to be successful. For the 12-13 school year the program is serving 90 students from underrepresented populations in the STEM fields. MESA continues to be the only student program at Yuba College focused on STEM students, and in particular providing educational opportunities to increase diversity in the STEM fields.

Program Description : The Math, Engineering, and Science Achievement (MESA) Program is nationally recognized for its innovative and effective academic development program. MESA engages thousands of educationally disadvantaged students so they excel in math and science and graduate with STEM-based degrees. Most MESA students are the first in their families to attend college. Most are low-income and attend (or have attended) low-performing school with few resources. Through a close partnership with industry and the state's education systems, MESA

> Challenges students with rigorous academics.
> Actively involves industry in its activities and strategic planning.
> Ensures that college prerequisites, transfer requirements and graduation requirements are successfully fulfilled.
> Builds supportive communities to encourage academic success.
> Teaches collaborative learning techniques that help reinforce key concepts.
> Provides professional development for math and science teachers.

The Yuba College MESA Program currently serves 90 students from diverse backgrounds. Over the ten years the program has operated on campus, 84% of YC MESA students went on to a 4-year university. The program works to create a community of learning for the students. They are provided a space to interact with students, tutors, and professors. Students are taught and encouraged to use the resources that are available to them, as well as seek out any additional support they need. The MESA program has provided field trips, guest speakers, industry tours, and campus tours to the students.

The MESA Program is supported by the Faculty Advisor, Dr. Roger Davidson, and the MESA Council. The Council is scheduled to meet monthly to discuss the activities that are taking place in MESA and what the program can do to support each discipline area. With suggestions from the Faculty Advisor and the council, MESA has purchased software, MATLAB, for program and student use. For the fall of 2012, MESA's program budget came from carryover from the previous grant. This money was used for travel, tutors, printing, and graduation expenses.

The MESA program is actively seeking and writing grants to help with funding of the program and student support.

Students in the MESA program have access to computers and software that is specific to their particular programs of study. They also have access to textbooks for their courses that they can use while in the MESA center. These books are not to be removed from the center. They also have access to the MESA director. Currently the director is part time, working 3 days/2 days every 2 weeks. The director’s schedule is posted for students. The director works with students to establish study groups, tutoring sessions, tutors for the center, edits personal statements for college applications and scholarships, resume support, double check educational plans. The limited time the director is on campus is a problem, limiting student access to support. Not being on campus full time has increase the turn around time for editing of personal statements and resumes.

The lack of a MESA counselor is also difficult. Students are often in need of ed plans or changes to their existing one based on where they are looking to transfer to. MESA requires that ed plans be up to date. Students must often wait weeks to see a counselor. There is also the problem of seeing an adjunct counselor and then having errors made because not every math and science course is offered every semester. This can add 1-2 years depending on which classes or how many classes the errors were made on.

During the 2012-2013 school year, it is known that 25 of the 90 MESA students transferred on to a 4-year university. One student was accepted to summer intern programs at UC Santa Barbra and UC Berkley, ultimately selecting Berkley. Five students received scholarships from PG&E ranging from $1000-$5000 each. At the end of the 2012-2013 school year a transfer banquet was held to celebrate student achievement. Awards were given based on GPA, a total of 49 certificates were given for students with a GPA of 3.33 or better.

Industry Trends and Program Data Analysis : The MESA program is designed to increase the number of minority students earning degrees in the STEM fields. This is a goal that is set by State MESA not the campus. Our program supports students from lower socio-economic backgrounds with all of our active MESA members receiving financial aid. Students cohorts are very heterogeneous allowing for students to interact with other cultures. The diversity of the YC campus and the community can be seen within the MESA program.

Curriculum & SLO Assessment Summary : MESA works to monitor student progress in class and provide support for students as needed. Throughout the day there are tutors available in the MESA center for drop in support of MESA and any STEM student in need. The tutors are given the same training as those in the College Success Center (CSC) to better prepare them.

The PLO's that were to be assessed were:
1) After participating in Academic Excellence Workshops (AEWs), the students will demonstrate a command of collaborative work skills in the chosen field of study and exhibit the appropriate study skills to master the material.
This was not fully assessed last year. AEWs were held in Math 1A, Math 2A, and Physics, but the overall impact on student learning was not determined

2) Have identified a long-term support system including faculty, on-campus resources, professional organizations, and potential employers.
Yuba College MESA is fortunate enough to have support of faculty and staff. The faculty believes in the program and the impact it has on students. The faculty hold office hours in the Center, and stop in between classes to check in on students. The faculty hold AEWs in different coursed through out the semester and help to identify students that would benefit from the support of the program.

3) Have an educational plan that outlines the requirements needed for transfer to a four-year institution.
Every MESA student has an educational plan that is up to date at the time of enrollment in the program. The ed plans are checked against the courses the students' are enrolled in throughout the quarter. If there are discrepancies, students are asked to have them updated. In 12-13 twenty-seven ed plans were updated.

4) Have an adequate resume and personal statement in order to obtain scholarships and internships to professionally develop themselves for tomorrow's workforce.
At the first MESA meeting each semester students are provided with resources to help them create their resumes and personal statements. Students are encouraged to email both to the director for editing and review. In the fall semester last school year 35 students submitted resumes or personal statements for review. These were edited, comments were added, and they were returned electronically to the students. Students were then able to use them for college applications, scholarships, and internships.

A full set of rubrics for the SLO's has been added to the documents.

Future Goals and Program Direction: The program plans to rewrite the MESA grant, based on the current RFA, and to reapply when grant becomes competitive. The program believes it is important to continue to fully fund the MESA Director position and to rehire a MESA Specialist.

Through grants and other sources, the program plans to secure outside funding. The program will continue to create community partnerships for education and internships for its student population.

Are you ready to submit your final program review?: Yes

Goal	Recommendations	Plan of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
YC Goal 2 - Restore full funding to the program in order to: Fully support students needs based on the RFA Hire a MESA Support Specialist				

Goal	Recommendations	Plan of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
YC Goal 5 - The MESA program requires that all students have an up to date educational plan. This helps students examine what their career goals are, where they would like to transfer to, and how long they would like to stay at the community college. The ed plan also allows the program director to check to see that they students are on track for transfer/graduation and to encourage them as they work through their courses. The director is also there for students to talk with prior to dropping classes to make sure that they understand the consequences. An example of this would be a student that decided to drop their Trig class over the summer. Doing this means that they do not have Calc 1A complete. Calc 1A is a pre-req for Physics 4A, which is only offered spring semester. It is important that the student understand that dropping Trig would add a year to their classes.				

Goal	Recommendations	Plan of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
YC Goal 7 - While not officially connected with the Woodland MESA program, YC MESA has worked with them over the last year to develop some of their practices. YC MESA has shared how we conduct progress reports, what information we keep in file for each student, and how we handle tutors in our center. Yuba College MESA has accepted numerous students that have transferred to our campus to finish out their transfer credits.				

Goal	Recommendations	Plan of Action & Budgetary Impact / Tasks	Status	Feedback & Follow-Up
YC Goal 8 - Even though they Yuba College MESA program in not currently funded by the state, the director works to maintain partnerships with both UCOP and CCCCO. UCOP sponsors two leadership conferences every year, 1 fall and 1 spring. By maintain the partnership Yuba College MESA have been invited to both conferences. UCOP also is the main clearing house for scholarship and internship opportunities, both of which our students have been able to take advantage of through our continued partnership.				