Analyze changes in student achievement and achievement gaps over the past five years. Cite examples of using data during that time as the basis for resource allocation (e.g. human, facilities/physical, technology, financial, professional development) or making other changes that resulted in improvements in student achievement.

Physics/Astronomy/Physical Science (PR)

[President's Office, Program Reviews, Academic Affairs (PR), Math, Science & Engineering Division (PR)]

Physical Science sees many student lacking in basic skills. This is seen in assessment data for SLO 1. For the last two years SLO 1 has not been met. This SLO measures the ability of students to solve simple mathematical equations. As a result, the instructors are trying to incorporate more example and activities to improve student success in this area. Physical science has requested funding to support tutors/SI leaders at the learning center. In summer 2012, the Learning Center offered tutoring for the Palmdale physical science course. This proved to be extremely successful with one of the highest success and retention rates. As a result, we feel that funding for tutors to support physical science courses is crucial to increased success. Physics and Astronomy also would greatly benefit from funding for tutors/SI leaders. PHYS 101 especially would benefit because there are no pre-requisites for the course and basic skills are an issue with many of the students. Mr. Valiotis has successfully procured two Title V grants for developing STEM based courses at AVC. These have been partially used to develop conceptual based learning curricula for all course in physical sciences. As the SLO data suggest, student have benefited from courses taught using this approach. The money from these grants have also been used to improve laboratory courses at both campuses by the inclusion of better equipment and new technology.