Expected Outcome 1: African American Student Enrollment
African American student enrollment will be increased by 5%.

Assessment Method 1: Based on existing data and number of new students
Assessment Method Description
African American student enrollment in 2011 was 330 and in 2012 it was 333. Less than a 1% increase. Number of students in AEP was 150 in 2011 and 143 in 2012. The number of students actually decreased.

Findings

How did you use findings for improvement?
A survey will be developed and administered at the end of the semester to determine student satisfaction and better ways to retain students.

In May 2013, a recruiter was hired to recruit underrepresented engineering students in the College of Engineering.

Additional Comments

Expected Outcome 2: Engineering Enrichment Camp Students
Students will move into their major within 4 semesters with a 75% retention rate.

Assessment Method 1: Analysis of Existing Data based on number of students
Assessment Method Description
Number of students who moved into their major.

Findings
**Cohort Group 1**

Cohort 1 consisted of 17 students. Nine (53%) of the 17 students are still in engineering. Four of the students have stayed within the GPA range of 3.21 to 3.90. All of the students have moved into their major. Two students currently intern with Alabama Power Company, Inc.

**Cohort Group 2**

Cohort 2 consisted of 21 students. In spring 2013, three of the 21 students transferred out of engineering. Eighteen of the students are still in engineering. Two of the 18 students are not in AEP, but in engineering. The average cumulative GPA for the students after two semesters is 2.845, with a low at 1.97 and a high at 3.87. The standard deviation is .597. 16 students moved into their major in the fall 2014. This reflects a 77% retention rate of students who moved into major in one year. If the two students, not in AEP, moved into their major, the retention rate for this group is 86%.

**Cohort Group 3**

This Cohort consisted of 20 students. Data will be available after the spring 2014 semester.

**How did you use findings for improvement?**

**Additional Comments**

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**Expected Outcome 3: Enrollment for Underrepresented Engineering Students**

AEP Students served: 162 African American students, 4 Hispanic students, 9 Other students, and 6 White students (3 males and 3 females). Hispanic students will be increased to 10 and White female students will be increased to 7.

**Assessment Method 1:** Number of students enrolled

**Assessment Method Description**

Hispanic and White female students are underrepresented. Increase the numbers by actively recruiting. The new recruiter is responsible for helping to increase the number of Hispanic and White female students in the College of Engineering, as well as in the AEP.
Findings

How did you use findings for improvement?

Additional Comments

Expected Outcome 4: Graduation Rate for African American Engineering Students
African American engineering graduates will increase by 5%.

Assessment Method 1: Analysis of Existing Data
Assessment Method Description
Based on existing data, the number degrees awarded to African American students has increased progressively from 10 graduates in the academic year 2004-2005 to 48 graduates in the academic year 2011-2012. From 2010-2011 to 2011-2012, the number of graduates increased by 9 (18%).

Findings

How did you use findings for improvement?

Additional Comments

Expected Outcome 5: Graduation Rates for African American Engineering Students
Student graduation rate from 48 students to 50 students by Summer 2014.

Assessment Method 1: Number of students to graduate
Assessment Method Description
There are 30 seniors and 30 juniors in AEP. The 30 seniors will graduate in December 2013, Spring 2014 or Summer 2014, along with the other African American engineering students not participants in the program. In addition, some of the juniors in AEP will be moving into senior status in Spring and possibly graduating in Summer 2014.

Findings
Expected Outcome 6: Professionally Develop Students
Students will develop professionally to achieve 90% job placement at graduation.

Assessment Method 1: Percent of students who receive job after graduation
Assessment Method Description
The number of students who receive jobs will be the measurement for this outcome.

Findings
In spring and summer 2013, five students graduated and received job offers.

How did you use findings for improvement?
In fall 2013, two professional development workshops are offered to students. The first workshop, titled "Interviewing Skills" was offered Sunday, September 29th.

November 3, 2013, another workshop will be offered to students. The workshop will be titled, "Communications Skills".

Additional Comments
In January, 2014, a survey will be administered to assess the effectiveness of the professional development workshops.

Expected Outcome 7: Recruitment of African American Engineering Students
The AEP Recruiter will recruit in the Black Belt area of Alabama to reach prospective engineering students at 35 high schools and Wallace Community College.

Assessment Method 1: Number schools reached.
**Assessment Method Description**  
As of October 1, 2013, the AEP Recruiter has visited 9 out of 35 schools in the Black Belt area. High School counselors and teachers have been contacted for future visits.

**Findings**

**How did you use findings for improvement?**  
The recruiter updated his recruitment schedule to move more aggressively to visit high schools.

**Additional Comments**

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**Expected Outcome 8: Recruitment-High School and Community College Visitations**  
The AEP Recruiter will recruit in the Black Belt area of Alabama to reach prospective engineering students at 35 high schools and Wallace Community College.

**Assessment Method 1: Number of schools reached**  
**Assessment Method Description**

**Findings**  
As of October 1, 2013, the AEP Recruiter has reached 9 out of 35 schools in the Black Belt area.

**How did you use findings for improvement?**  
AEP will have a Pre-view Day in March 24, 2014. The targeted number of underrepresented engineering students for the Pre-View Day is 150 students.

**Additional Comments**

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**Expected Outcome 9: Recruitment-High Schools and Community College Visitations**  
AEP Recruiter will be used to increase underrepresented engineering students enrollment by 10%.
**Assessment Method 1:** Analysis of Existing Data

**Assessment Method Description**
There are currently 99 freshman students enrolled in AEP. By fall 2014, increase the enrollment of underrepresented engineering students by 9% to 10%.

**Findings**
Findings will be assessed in late August, 2014.

**How did you use findings for improvement?**

**Additional Comments**

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**Expected Outcome 10: Recruitment-Hispanic and White Female Students**
Recruitment to increase the enrollment of Hispanic and White female students by 4 and 6, respectively.

**Assessment Method 1:** Analysis of Existing Data

**Assessment Method Description**
Students served: 162 African American students, 4 Hispanic students, 9 Other students, and 6 White students (3 males and 3 females). Hispanic students will be increased to 10 and White female students will be increased to 7.

**Findings**

**How did you use findings for improvement?**

**Additional Comments**

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**Expected Outcome 11: Retention - Collaborative Learning Groups**
Students are involved in 1 hour per week of shared learning and social engagement as part of participation in a Math, Science or Programming collaborative learning group.

**Assessment Method 1:** Correlation of Number of Hours and grades (A, B, C, D, F)

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**Assessment Method Description**
Each week, students are required to sign into a computer that computes their hours of participation. In addition, at the beginning of each collaborative session, a sign in sheet is signed by each participant. To assess shared learning, each student goes to the white board and work through a problem with shared input from other students in the session. The problems are copied from the board onto a sheet, turned in, reviewed, and added to a "study bank". At the end of each week, the number of completed problems worked, and the participation hours of the students, are recorded on an excel spreadsheet. At the end of the semester, the math, science and programming grades for each student are collected and summarized to see if there is a relationship between the hours of participation and their grades.

**Findings**

**How did you use findings for improvement?**

**Additional Comments**

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**Expected Outcome 12: Retention - Interactive Learning lab**
Students are tutored, complete homework or are engaged in computer-aided problem-solving two hours per week.

**Assessment Method 1: Number of hours tutored**

**Assessment Method Description**
Students are required to sign in and out of a computer that computes the hours of participation. Students attend the interactive learning lab 2 hours per week. During the two hours, if students need assistance with their science, math or programming, upper level students are available to assist. At the end of the semester, hours of participation are computed and compared with the students' GPA.

**Findings**

**How did you use findings for improvement?**
Additional tutors were needed in the Interactive Learning Lab.

**Additional Comments**
**Expected Outcome 13: Retention-Collaborative Learning Groups**
As a result of participation in a Math, Science or Programming collaborative learning group, the students are involved in 1 hour per week of shared learning and social engagement.

**Assessment Method 1:** Correlation of Number of Hours and grade (A, B, C, D, F) in subject

**Assessment Method Description**
Each week, students are required to sign into a computer that computes their hours of participation. In addition, at the beginning of each collaborative session, a sign-in sheet is signed by each participant. In order to assess shared learning, each student goes to the white board and work through a problem with shared input from other students in the session. The problems are copied from the board onto a sheet, turned in, reviewed, and added to a study "bank". At the end of each week, the number of completed problems worked and the number of hours each student participates are recorded on an excel spreadsheet. At the end of the semester, the math, science and programming grades for each student are collected and summarized to see if there is a relationship between the hours of participation and the grades.

**Findings**
There is a correlation between the number of hours the students participate in their collaborative groups and the total grades achieved.

**How did you use findings for improvement?**

**Additional Comments**

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**Expected Outcome 14: Retention-Interactive Learning Lab**
Students are tutored, complete homework or engaged in computer-aided problem-solving two hours per week.

**Assessment Method 1:** Students sign in and out of a computer that records their time.

**Assessment Method Description**
Students are required to sign in and out of a computer that computes
the hours of participation. Students attend the interactive learning lab 2 hours per week. During the two hours if students need help with math, science or programming, upper level students are available to assist. At the end of the semester, hours of participation are compiled and compared to the students GPA.

Findings

How did you use findings for improvement?

Additional Comments

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**Expected Outcome 15: Retention-Into Major**

AEP Students served: 162 African American students, 4 Hispanic students, 9 Other students, and 6 White students (3 males and 3 females). Hispanic students will be increased to 10 and White female students will be increased to 7.

**Assessment Method 1:**

**Assessment Method Description**

Findings

How did you use findings for improvement?

Additional Comments

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**Expected Outcome 16: Students will experience advanced knowledge about AU and Engineering**

Summer Engineering Enrichment Program will provide students with advanced knowledge of AU and College of Engineering in a safe, supportive and nurturing environment. Students will retain key information regarding AU and the College of Engineering between the start of the Summer Program and the End of the Summer Program. Students will be expected to correctly answer 85% of targeted questions that they previously answered at the start of the Engineering Summer Camp.

**Assessment Method 1:** Pre- and Post Survey

**Assessment Method Description**

At the start of the engineering summer camp, AEP staff will administer
a pre-test, consisting of 10 multiple choice questions to all of the students at the AEP Summer Engineering Enrichment Program Orientation Session. At the awards ceremony, 3 weeks later, all students are given a post-test to determine whether their knowledge of AU and the College of Engineering has increased during the 3-week period. The results of the pre and post-test results will be analyzed.

Findings

How did you use findings for improvement?

Additional Comments

Expected Outcome 17: Students' Professional Development

Professional Development Workshops are given to help students to develop lifelong success strategy skills, a sense or moral obligation, and maintain and improve professional competence.

Assessment Method 1: Number of leadership positions and career options available to students.

Assessment Method Description

Students participated in two professional development workshops. One was communications and the other was making a good first impression. Nine students obtained co-op or internship positions.

Findings

A future survey and focus group will be used to measure student satisfaction.

How did you use findings for improvement?

Additional Comments