

### APR Goal and Outcome—2017-2018

For descriptions and examples of all APR Goal and Outcome items, please refer to the APR How To Guide—2017-2018

#### Section I: APR Goal Overview

##### IA1. Program (Select your program from the drop down list)

Sciences & Mathematics: Math

##### IA2. Other Program (If not on above list)

##### IB. Program Lead (Your first and last name)

Mike Mayfield

##### IC. APR Goal Short Title:

iPads

##### ID. APR Goal Status:

- Continuing from Last Year  
 New This Year  
 Fast Track

##### IE. Institutional Plan(s) Addressed

Which Institutional Plan(s) does your goal address? Check all that apply.

- |   |  |
|---|--|
| <input type="checkbox"/> Educational Master Plan          | <input type="checkbox"/> Student Success Plan              |
| <input checked="" type="checkbox"/> Strategic Action Plan | <input type="checkbox"/> Human Resources Plan              |
| <input type="checkbox"/> Facilities Master Plan           | <input type="checkbox"/> Equal Employment Opportunity Plan |
| <input type="checkbox"/> Basic Skills Action Plan         | <input checked="" type="checkbox"/> Other                  |
| <input type="checkbox"/> Student Equity Plan              |  |

If "Other" Please indicate which plan(s).

Technology Plan

##### IF. Institutional Plan Goal(s) Addressed

1.2 Course success rates

##### IG. Measureable Objectives(s)

1.2 Increase successful course completion rates by 5%

## Section II: APR Goal Measures, Anticipated Outcomes, and Activities

### I.A. APR Goal Measure

Indicate the type of outcome measure you will use to measure this 2017-2018 annual program review goal:

- |  |  |
|--|--|
| <input type="checkbox"/> Course Student Learning Outcome (SLO)         | <input checked="" type="checkbox"/> Student Achievement Outcome (SAO)          |
| <input type="checkbox"/> Program Student Learning Outcome (PSLO)       | <input type="checkbox"/> Program Effectiveness Measures (PEM)                  |
| <input type="checkbox"/> Institutional Student Learning Outcome (ISLO) | <input type="checkbox"/> Other outcome measure type (Describe in IVE Comments) |

### I.B. APR Goal Anticipated Outcome (Rubric Criteria 1, 2, 4, 5)

Please briefly describe what outcome you expect to achieve with this particular goal in terms of its impact on student learning, student success, student achievement or the “Goal Measure” you indicated in I.A. Be sure to include a discussion of the evidence used to support your assertion, and the “benchmark” value of the goal outcome.

The Stats 1510 Class is designed around an iPad App (TC-Stats) created by Taft College. The current iPads cannot be updated to the current iOS, which means our students will no longer have access to the TC-Stats App. TC-Stats is very user friendly and the elimination of the APP will cause students success rates to fall. Based on data from the Taft College Office of Institutional Research, the average success rate for Stat 1510 during the academic years 2010 – 2014 was approximately 32%. The same data shows the average success rates for academic years 2014 – 2017 at 63%. This dramatic increase in student success is contributed to TC-Stats (iPad software) in conjunction with MyLearningMachine.

Stat 1510 student success rates will be maintained at their current rate or increased up to 5% as measured during the Fall 2017 semester with the continuation of this important resource.

University of California Irvine medical school reported iPad equipped medical students scored 23 percent higher on national exams than previously unequipped classes. Source: [MobiHealthNews](#)

According to Pearson Foundation’s survey More than six in ten college students and high school seniors agree that tablets help students to study more efficiently (66% and 64%) and help students to perform better in classes (64% and 63%). Source: [Pearson Foundation](#)

In a study done by Houghton Mifflin Harcourt in California, showed that students using iPads saw their math test scores increase 20% in one year compared to students using traditional textbooks. Source: [CNN Tech](#)

A study at Oklahoma State University concluded that 75% of students agreed that the iPad enhanced their learning experience. Source: [Oklahoma State University News](#)

### I.C. APR Goal Activities (Rubric Criterion 5)

Please briefly describe the activities you intend to implement to achieve this particular goal. Include a timeline of the activities and assessment/evaluation of outcomes.

85 iPads with protective covers need to be purchased over the next 10 – 12 weeks to ensure continued access to TC-Stats. Student success rates will be measured the semester following (Fall 2018) the purchase of the new iPads to see if they decrease, remain steady, or increase as a result of this activity.

### Section III: APR Goal and Resource Request

#### IIIA. Required Resources Category:

Please indicate the types of resources required to implement the activities for this APR goal.

- |  |   |
|--|---|
| <input type="checkbox"/> Personnel: Faculty<br><input type="checkbox"/> Personnel: Classified<br><input type="checkbox"/> Personnel: Other<br><input checked="" type="checkbox"/> Technology | <input type="checkbox"/> Professional Development<br><input type="checkbox"/> Facilities<br><input type="checkbox"/> Equipment or Supplies<br><input type="checkbox"/> Other (Describe in IVE Comments) |
|--|---|

#### IIIB. Required Resources Description

Please describe any resources you will need to implement the activities associated with this goal. Requested resources should follow from the narrative in IIC above.

85 iPads and protective cases. Purchasing 85 iPads is less expensive than creating a dedicated computer lab for statistics students to use to run their course software. The skills students learn from using TC-Stats are transferrable into other classes where statistical analysis is needed.

Total cost for this project is \$37,641.61; however, \$23,581.63 is in an account that has been accumulating since 2007 specifically for this need (budget code 12616-209-XXXX-17010), which brings the actual new cost to \$14,059.98.

#### IIIC. One Time Start Up Costs:

\$14,059.98

#### IIID. Annual Costs:

0

#### IIIE. Total 5 Year Costs:

\$37,641.61

#### IIIF. Proposed Funding Source(s):

\$14,059.98 from General Fund, Technology, \$23,581.63 from budget: 12616-209-XXXX-17010

<b>Section IV: APR Goal Additional Information</b>
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**IVA. Desired Start Date:**

January 2018
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**IVB. Expected Completion Date:**

June 2018
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**IVC. Is Project Ongoing with No Expected Completion Date?**

- Yes  
 No

**IVD1. Will Other Divisions or College Areas be Impacted?**

- Yes  
 No

**IVD2. If Yes, then Describe how Other Divisions or College Areas Would be Impacted:**

<p>Stats 1510 is a transfer class for many STEM fields. Loss of access to TC-Stats will dramatically impact student success in Stat 1510 and delay or prevent transfer for many students. In addition, with the new funding formula proposed by the chancellor's office, a drop in success in Stat 1510 could easily have a negative campus wide impact.</p>
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**IVE. Comments:**

<p>An iPad app (TC-Stats) was designed specifically for data analysis on the iPad for Stat 1510. The course was redesigned to focus on the iPad as the computational platform. In order to keep the app current on the iTunes store and available to students we keep TC-Stats updated with the current iOS. We recently updated TC-Stats to iOS 10, backward compatible to iOS 9. IT has informed us that the current set of iPads, most of which are more than 5-6 years old, are not capable of being updated to iOS 10. This creates the inevitability of students not being able to access TC-Stats for their class. Currently we teach three sections of face-to-face Stat 1510 with a maximum enrollment/need of 105 iPads. We have 20 iPads that are capable of being updated.</p>
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The following items outline the urgency in completing this request. This information was obtained directly from Apple Developer Support.

1. Apps must be kept up to date. If we did not update our app to iOS 11 compatibility then any device with iOS 11 (99.99% of all student owned devices) would not even see the app in the app store. This was new with iOS 11. Previously, older versions were visible and the most recent version the app was compatible with was displayed. Back when iOS 10 was the current OS and we were compatible to iOS 9, we were able to download the app but some oddities in behavior were observed. Apple no longer allows that.
2. Apps that are not kept up to date with the current iOS are removed (made inactive) in the app store. The exact grace time was a bit unclear. iOS 11 came out in the fall and we just updated last month so there is clearly several months of grace time.

3. iOS 11 is in fact only backward compatible to 9.3, which is what our iPads have in them. Our iPads can not be updated beyond iOS 9.3.2 due to hardware limitations.
4. When iOS 12 comes out (expected fall 2018) and we update, it will only be compatible to iOS 10.x. Apple keeps moving the bottom along to ensure reasonably updated devices.
5. If we fail to update the iOS we would take the risk of the app suddenly no longer being available. In addition, any student using their own equipment (very prevalent in the online sections but unpredictable in the face-to-face sections) and keep up to date as most students do, they would not even be able to discover our app in the app store. In addition, failing to keep the iOS current is just a bad practice and irresponsible.

The total cost is projected as \$37,641.61. There is a total of \$23,581.63 under budget code 12616-209-XXXX-17010 that was established to hold replacement fees collected from students who checked out ThinkPads and iPads from Stat and Calculus courses, which were not returned. These funds were designated specifically to be used for replacement purposes. This reduces the current need to \$14,059.98.

**IVF. Prioritization by Program Lead:**

1. iPads