

Award Points Program: Utilization of Google Sheets™ Pivot Tables for Student Awards Points and Required FFA Activity Credits

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Introduction

According to the National FFA Organization (2017), “FFA members who take advantage of the many leadership opportunities in FFA become top leaders in the organization” (p. 48). The FFA is a vital component of the comprehensive model for school-based agricultural education (SBAE) programs, which exists to provide experiences in personal, academic and career areas to build future leaders (National FFA Organization, 2017).

Within the educational framework of the SBAE program at Anderson Union High School, students enrolled in SBAE were required to attend four FFA Activities each semester as the FFA part of their grade in class. The American Association for Agricultural Education (AAAE) outlines standards for SBAE teacher preparation programs as learning goals for graduates of teacher education programs. The standards indicate all teacher education graduates learn to manage a total program in CTE, and develop skills to communicate effectively with parents and students (AAAE Teacher Education Standards Committee, 2017). For the educators at Anderson Union High School, tracking various events students attended and having attendance information readily available to teachers, students, and parents was imperative.

Prior to the implementation of the Points Award Program, points were tracked using an Excel spreadsheet saved to a shared computer drive. Each student’s name was listed in a separate row, and each event he or she participated was listed in a separate column. With 150 students and more than 75 events each year, the original spreadsheet became overwhelming and cumbersome. As such, individuals who entered participation points made errors, which affected students’ overall points and FFA grade. The points system also required two separate categories within the totaled points system and needed to be able to: (a) count the number of activities a student attended, (b) identify which quarter the events were attended, (c) calculate the total activity points for the end of the year awards trip, and (d) provide a list of the top 25 students for the awards trip. Therefore, a ledger-based program was developed.

The initial ledger-based system allowed points to be entered systematically based on the student’s name and entries could be double-checked by the advisor more efficiently. However, the point tallying was done by hand with a group-sort and group-count method, and problems with the program persisted. The problems addressed after the introduction of the initial system included (a) only one person being able to edit at any given time, (b) the process to calculate points included confusing steps, (c) students’ names were being entered incorrectly which split their points between the different versions of the name, and (d) to share results with students, reports had to be printed. This established the need for a more streamlined system.

The Award Points Program was designed using Google Sheets™ and improved the original ledger system by addressing the issue of multiple authors. By utilizing Google Sheets™, points can be entered by any person allowed editing access. Also, because it is web based, points can be added using any electronic device at any FFA activity, thus updating points as they are achieved. To improve the calculation of points, pivot tables were introduced. The pivot tables work automatically to tally the points rather than having to manually group-sort and then group-count. To address area (c), students’ names were uploaded into a master list and a data validation code was added to the master ledger. The master ledger then used a drop-down menu with the students’ names feeding from the master list, so a student’s name must be on the master list to be added for points. Finally, with Google Sheets™ being web based, the pivot tables were embedded in the chapter website, giving parents and students 24-7 access to points.

How it works

FFA Advisors gain access to the Award Points Program via Google Sheets™, and save it to Google Drive™. Next, students' names were added to the MASTER LIST. Individuals granted editing privileges added student activities to the ledger. In the case of the developer, the FFA Advisors and chapter sentinel added activities, and students were awarded both FFA points (for awards trip at the end of the year) and activity points (points toward the FFA component of student's class grade). The LEDGER was updated following every chapter activity, and live results built in PIVOT TABLES were embedded in the chapter website as shown in Figure 1.

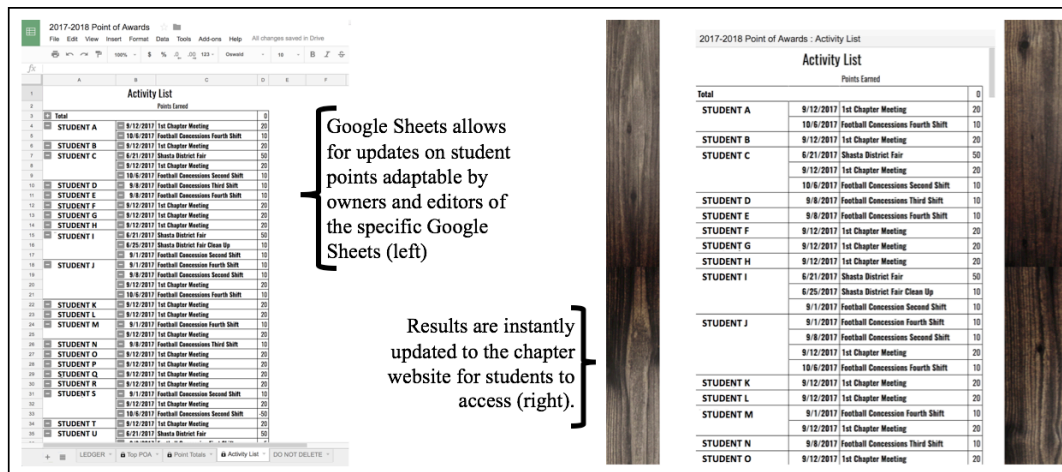


Figure 1. The Award Points Program developed in Google Sheets™ pivot tables as used by Anderson Union High School.

Results to date

The Google Sheet was made available to all teachers within the Agricultural Education program at Anderson Union High School, and the resulting pivot tables were also embedded into the FFA chapter website which allowed students to see their up-to-date FFA Points and Activities. Students were able to print activity lists to complete their FFA record book. Also, teachers were able to sort activity points for students by quarter and assign student grades for their respective agricultural classes. Each year, the ledger sheet and pivot tables were placed into an archive for use on State and American FFA Degree applications.

Future plans

The Award Points Program has been shared with other FFA Chapters in California and continues to be the basis of point calculations at the Anderson FFA Chapter where it was developed. With the sharing capability of Google Sheets™, the Award Points Program can be easily shared and modified to any SBAE program. Also, since it is web based, the developer is able to provide troubleshooting with chapters using the program. Future plans include using this program in teacher preparation as a tool to help future agricultural education teachers keep track of FFA activities and awards points.

Costs/Resources Needed

Program of Activities Spreadsheet - FREE

Google Sheets™ – FREE

Chapter Website – cost varies, can be housed on school website

References

AAAE Teacher Education Standards Committee (2017). *Standards for school-based agricultural education teacher preparation programs*. Retrieved from <http://aaaeonline.org/Standards-for-Teacher-Preparation>

National FFA Organization (2017). *Official FFA Manual*.