

**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 were required to attend four FFA Activities each semester. 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). Therefore, being able to track student attendance at various FFA events and make that information readily available to them, their parents, and their teachers was imperative. To that end, a Points Award Program was created.

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 every 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 their 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 conducted 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, which work automatically to tally the points rather than having to manually group-sort and then group-count. 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. 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 GoogleSheets™, 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 students' class grades). The LEDGER was updated following every chapter activity, and live results built in PIVOT TABLES were embedded in the chapter's website as shown in Figure 1.

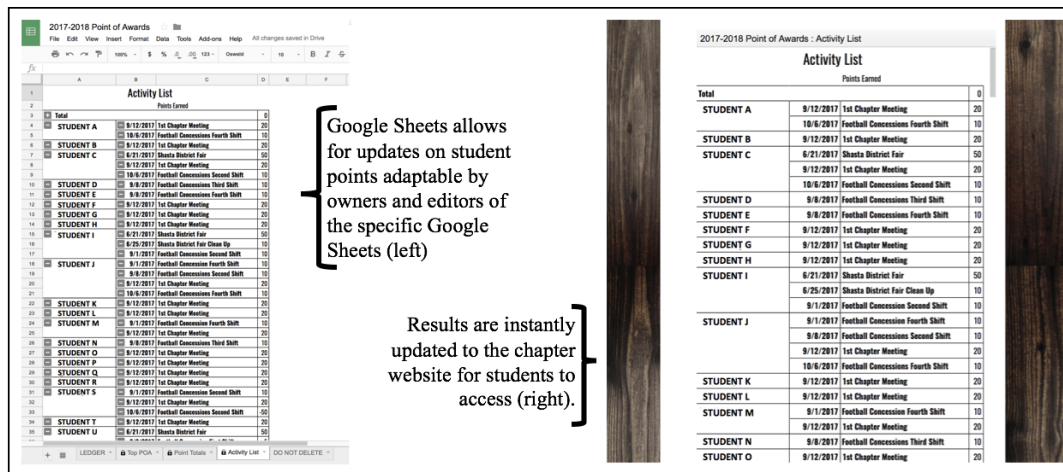


Figure 1. The Award Points Program developed in Google Sheets™ pivot tables as used by Anderson Union High School.

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 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 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 shared and modified easily to fit 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

Since this innovation is built within a free online platform, there is no cost to teachers wishing to use the pivot table program. The only potential cost to this innovation would be the cost of a chapter website used for embedding the program for dissemination to students.

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*.