

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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Project Number

J1217

Project Title

Determining an Unbiased College Football Division 1A Ranking System

Abstract

Objectives/Goals

My objective is to determine if there is a fair and unbiased way to rank Division 1A college football teams by using an equation that considers objective measures of a college football team#s performance. The goal is for an alternative way from the current system that places too much emphasis on opinion polls rather than objective measures.

Methods/Materials

I first determined the components of the formula. There were five categories of great importance for ranking criteria. These are a team#s record, conference rank, strength of schedule, margin of victory and bonus points. I then determined the weight for each ranking criteria. I obtained text file containing the results of every 2001 Division 1A game played by all of the 117 teams. I inputted the data from text file into Microsoft Excel. I then calculated the points, in each of the five categories, for each team. I plugged the points into the total formula and ranked each team based upon the most points. Finally, I compared my ranking results to the BCS, ESPN/USA Today Coaches Poll, and Associated Press Poll rankings. I used the computer, a spreadsheet, calculator, and the internet to conduct my experiment.

Results

My results showed that my top 10 teams were closely correlated to the Associated Press Poll, the USA Today/ESPN Coaches poll and the BCS rankings. Using my method this past season would have made a difference in who played in the national championship game. It should have been between Colorado and Miami, not Nebraska and Miami.

Conclusions/Discussion

In conclusion, I believe that my results have supported my hypothesis. I have developed a fair and unbiased equation that considers objective measures and by using this equation it is a better way to rank the top college football teams in the nation. I now have a better understanding of how to put formulas into Excel.

Summary Statement

My project is about creating an equation that when used will provide a fair and unbiased method of ranking the top college football teams in the nation.

Help Received

Mother cut letters out at school office, because you have to be older than 18 to use the machine.