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College Writing and Research

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<div align="center">Does Number One Really Mean Number One?</div>

What I already know (and don't know) about my topic.

As an avid sports fan I know I have become addicted to college football. The complex

strategy of the game has always challenged my mind, while the heart-pounding action toys with

my emotions. Positioned in my lazy boy, armed with my remote, I spend large parts of my

Saturday afternoons skipping through the channels, stopping to watch the featured games.

Through years of watching college football I have become quite familiar with the various

schemes used to exploit the opponent's weaknesses. I can go as far as calling out various

coverage schemes before the ball is snapped based on the alignment of the defenders.

I know at the beginning of each season, 119 schools compete for a chance to play in one

of the 34 bowl games, and only two of those teams have a chance to play in the National

Championship. I know college football is not only a sport, but also a business as each year the

schools participating in the various bowls receive a large sum of money from the sponsors of the

bowl they are playing in. Based on the figures set each year, the more prestige a bowl has the

larger the payout will be.

Each year, deserving schools are assigned to different bowls by the Bowl Selection

Committee and the Bowl Championship Series, more commonly known as the "BCS". Despite

my vast football knowledge, I don't understand how these systems work, or what rules govern these systems. However, I do know each year several college football experts, coaches, and members of the media challenge the effectiveness of these systems in offering a fair opportunity for each school to compete.

With more research I hope to be able to understand how the BCS system works and what rules, factors, and scenarios play into the final outcome. I want to know if the BCS system is the most accurate way to determine the National Champion, or if there is a better system currently present.

Why I want to answer this question.

My love for college football drives me to uncover as much information regarding the sport and the forces affecting it as possible. I can't help being curious about the complicated nature surrounding the BCS system. Each year I watch different bowl games and can't help but wonder if the teams playing deserve to be there, or if more deserving teams are being left out on the sidelines. Common sense tells me numbers and equations can't truly determine the two possible candidates for the National Championship. If games could be decided on paper, why would we play them at all?

Story of the search.

When I first started this project I knew I wanted to focus on something I was truly passionate about. Outside of my family, sports are one of my true passions. With sports being such a diverse topic, I decided to focus my efforts on college football and its most controversial topic: "the BCS system".

I first focused on understanding how the BCS system works by traveling to *collegefootball.rivals.com*, which is considered by many to be "the bible of college football". In the expert portion was a breakdown of the official procedure to determine the BCS standings. I found the BCS system ranks the top sixteen teams in college football by combining three parts containing eight different ranking systems. The *USA Today* Coaches' Poll makes up the first third by allowing 60 coaches from 11 different conferences to rank their top 25 teams. Each coach gives 25 points to their first ranked team, 24 points to their second ranked team, 23 points to their third ranked team and continuing the pattern to their 25th ranked team. After all the coaches have voted, each school's points are added up leading to the final top 25. However, to be a part of the Final BCS standing, the total amount of points must be converted into ranking percentages. This is accomplished by taking a school's total points awarded by the voters and dividing it by the best possible point score which is 1,500 points, only occurring if all 60 voters give the same school 25 points.

The Harris Poll makes up the second third by nominating 114 voters. Each voter is related to college football in some way, whether being a former player or a member of the media. Each voter follows the same voting procedure as the members of the coaches' poll, and the final top 25 is compiled in the same way as the coaches' poll. To convert into ranking percentages the total points awarded must be divided by 2,850, only occurring if all 114 voters give the same school 25 points.

Finally, six computer ranking formulas make up the final third of the BCS formula. Each formula is different by weighing each factor differently, but each formula uses the same sets of data: date of game, location of game, who played, and who won. After the computer rankings are finished each school's highest and lowest rankings are thrown out leaving only four computer

rankings. These four rankings are added together and divided by 100 to get the final computer ranking percentage. The percentages are ranked highest to lowest resulting in the top team having the highest percentage.

Each of the three parts are independent of each other, but to get the final BCS standings, each school's three ranking percentages must be added together and divided by three to get the average ranking percentage. These percentages are listed highest to lowest resulting in the final BCS standings. Once the BCS poll is established, the top two teams are paired together to play in the National Championship leaving the remaining four BCS bowl games to be assigned by the selection committee. The champions of the six major conferences (Big Ten, Big Twelve, Pac Ten, ACC, SEC, Big East) are granted an automatic bid to play in one of these bowls leaving two "at large bids" to fill the remaining two spots. However, the "at large bids" can jump to four if the two teams playing in the National Championship were also champions of one of the major conferences. The selection committee is able to pick from any of the remaining BCS poll members to fill these "at large bids" as they choose each bowls participants. Any team not selected to be an "at large bid" joins teams who were not in the BCS poll to be selected to play in a non-BCS bowl.

With a better understanding of how the BCS system works, I decided to research possible problems regarding the accuracy of this system. To avoid the opinions of second grade sportswriters, I decided to search the Jstor Database. During my search, I found a journal entry by mathematician David Mease entitled "A Penalized Likelihood Approach for the Ranking of College Football Teams Independent of Victory Margins". David discussed the chances of error when using strength of schedule and margin of victory as tools to rank teams. Each school's game schedule consists of mostly in-conference games with only four out-of-conference games

making the chances of top-caliber teams facing the same opponents very rare. Without hard data the mathematical idea involved in comparing different team's strength of schedule and margin of victory becomes a guessing game. Instead of comparing schools to one another, this method is forced to compare the different conferences in which the schools play in. This methodology can lead to the popular opinion of seeing a major conference being stronger than its smaller conference counterpart. How can this cause a problem in the BCS system? David proposes a situation involving three undefeated teams from three different conferences without common opponents. This situation leaves no way to compare the teams together causing the strength of schedule system to resort to comparing the conferences to separate the schools from one another. It is mathematically impossible to determine the outcome of a game without playing it, so to say one undefeated team would not be able to beat all the teams another undefeated team beat is unrealistic. This same problem can occur when three or more teams finish with the same record requiring the BCS system to mathematically decide which team has the best record against tougher competition. Again how is it possible to reasonably say one team would fare better if they would have planned a different school's schedule?

With my new found error regarding the BCS system I turned to *ESPN's College Football Encyclopedia* in search of information regarding David Mease's theory. In 2003, the University of Southern California (USC), Louisiana State University (LSU), and University of Oklahoma (OU) finished the regular season with one lose a piece. Both human polls had USC ranked number one, LSU ranked number two, and Oklahoma ranked number three. After the computer systems calculated the strength of schedules of each team the final BCS poll featured OU and LSU playing in the National Championship leaving USC to play in the Rose Bowl. After LSU blew out OU earning the BCS Championship, members of the sports media rebelled against the

BCS naming USC the Associated Press National Champion making 2003 the only year to feature two National Champions. One year later the University of Auburn (AUB), OU, and USC finished the regular season undefeated, however, members of the human polls and the strength of schedule calculations from the computer rankings decided AUB had played the weakest schedule propelling USC and OU to play in the National Championship. The University of Auburn wasn't the only undefeated to be left out of the National Championship since 1998. There has been eight different occasions where teams from non-major conferences have gone undefeated only to be left out of the National Championship.

According to the *USA Today*, in 2007, after finishing the season undefeated, the University of Utah took the next step to fight for the chance to play in the National Championship by filing a lawsuit against the BCS stating they were deliberately put at a financial and competitive disadvantage by the BCS system. According to an article published in the *Washington Post,* after several other schools threatened to file lawsuits against the BCS, members of the United States Congress decided to assemble a committee to investigate the University of Utah's claim. During the investigation the members discovered in 2008 the BCS gave 109 million dollars to various schools with 104 million dollars being distributed to members of the six major conferences with larger sums going to the members playing in the BCS bowls, leaving only five million dollars to be split between the remaining conferences. With this new evidence combined with the automatic bid process, concerns of a possible monopoly between the BCS and the members of the six major conferences has became apparent breaking antitrust laws designed to prevent monopolies. Currently the investigation is still in process and has changed to include ideas of creating a playoff system to replace the current BCS system.

With the fresh idea of a playoff system in my head, I began to direct my research to find possible playoff systems the NCAA could incorporate and the benefits these systems would offer. I was quickly overwhelmed by the vast number of different playoff systems proposed featuring anywhere from four teams to 16 teams governed by starkly different rules. I decided to narrow my search by finding a playoff system endorsed by a central figure. During a video interview with *60 Minutes,* President Barrack Obama described his own version of an eight team playoff bracket taking place over a three week period. To fill the playoff pool, President Obama proposed taking teams with the eight best records in the NCAA without any sort of poll or ranking system to manipulate team standings. In his opinion, this system would level the playing field allowing schools a fair opportunity to compete. With a playoff system, smaller schools from non-major conference would have a chance to play for a National Championship and receive a fair amount of money to support their programs. A playoff system would discourage mathematical formulas and popular opinion from deciding a National Champion instead allowing this decision to be made on the football field where it belongs. Finally, a playoff system would offer one clear cut National Champion avoiding the 2003, debacle between USC and LSU.

What I Learned

With the conclusion of my research I gained a better understanding of the BCS process including the rules governing the system and how it affects college football. After analyzing the mathematical formulas used to complete the BCS process, I came to the conclusion I will need to invest in a calculator if I choose to project possible outcomes leading into postseason play. I knew college football was considered to be a business before I began my research, but I had no idea how large the actual figure of money was being transferred to the schools participating in

bowl games. I was further surprised to learn questions involved in how the money was being distributed could attract government officials to conduct an investigation into the matter. Regardless of the facts surrounding the BCS vs. playoff system debate, I feel everything comes down to how one perceives the information to formulate their own personal opinion on the matter. There is no true way of discovering which system is more accurate without trying out both systems and comparing their results. Personally, I began my research a supporter of the BCS, but after gathering more information and seeing the situation from a different point of view I have changed my position in favor of a playoff system. I feel a playoff system would allow teams often seen as underdogs the opportunity to prove themselves against national powerhouses giving college football a fresh look. I feel this revolution will unseat schools benefiting from automatic bids and national popularity forcing them to earn their right to be crowned National Champion on the football field instead of bypassing teams with the aid of voters and mathematical formulas. Regardless of the outcome of this debate, I look forward to next fall when college football begins a new chapter.