UFOC meeting Trinkle Education Suite January 25, 2012 Meeting Minutes

- 1. The UFOC committee members meeting convened at 4:15pm with members George Meadows, David Rettinger, and Deborah Zies present.
- 2. The UFC FOC motion on preferential voting was passed by all three colleges. The motion has been reviewed by the UFOC and is ready to be submitted to the UFC for the final vote. The motion and the rationale are attached to these minutes.
- 3. We discussed the elections that we need to carry out this semester.
 - a. George will finalize the list of replacements both elected and appointed that are needed.
 - b. Debbie will contact the committees that don't have terms listed and determine what replacements are necessary.
 - c. We hope to have this information ready for our next meeting (Feb 22^{nd}). We would like to have the elections completed by our March meeting (March 14^{th}), and have all elected and appointed positions filled and announced prior to the mid-April committee meetings so that new members can attend.
- 4. Debbie will discuss putting the database on the network with DTLT. Once it is shared, we can work out help from student aids in filling in the remaining faculty. Debbie has only entered faculty that are currently on committees.
- 5. Janet represented the UFOC at the University Academic Resources Advisory Committee meeting on Friday November 18th. The purpose of this meeting was to begin discussions on ways to streamline committee charges and simplify our current governance system. Janet will give us a report at our next meeting.
- 6. Our next meeting will be Wednesday Feb 22nd at 4pm in the Trinkle Education Suite.

The University Faculty Organizing Committee moves that the following changes be made to the Faculty Handbook, effective August 15th, 2012.

That Section 2.5.2.2 of the faculty handbook be amended to read:

2.5.2.2 Procedures for Committee Elections Once nominations close, the UFOC distributes ballots to all voting-eligible faculty. Faculty will have at least five business days after distribution to return their ballots to the UFOC. Elections will be conducted in a manner that assures anonymity. *Ballots shall solicit rankings of candidates by voters, with lower numbers indicating greater preference. Ties shall be permitted on individual ballots.*

That Section 2.5.2.3 of the faculty handbook be modified to read:

2.5.2.3 Procedures for Run-Off Elections In order to be elected to an at-large position on a standing committee, a nominee must receive forty percent of the votes cast. If no nominee receives sufficient votes, a run-off will be held among those receiving the three highest vote totals. If more than one position on a committee is being filled in an election but only one nominee receives sufficient votes, a run-off will be held between those receiving the two next highest vote totals. Run-off ballots are returned to the UFOC in a manner that assures anonymity.

Procedures for Determining Winners of Committee Elections. In order to be elected to an at-large position on a standing committee, a nominee must be the winner of a Condorcet method calculation. If more than one position on a committee is being filled in an election, those positions shall be filled in order of Condorcet ranking.

Rationale

Our current election system is unwieldy and can lead to both protracted repeated balloting and to results that are not in line with the preferences of the majority of voters. The UFOC therefore proposes a change to our voting rules and practices to resolve these concerns. We propose a shift to an online preferential voting system that uses "Condorcet methods" to tally votes. This system will yield a ranked order of candidates that reflects the collective will of the electorate after a single ballot.

The proposed voting system works as follows: After the nomination process (which would remain unchanged), all voting faculty would be sent an email soliciting their votes. The voting would be conducted online using a highly secure website designed for the purpose (http://www.cs.cornell.edu/w8/~andru/civs/). Voting would consist of rank ordering the candidates from most preferred to least preferred. The website tallies these ranks and generates a list of candidates in order of overall preference. Thus, elections requiring more than one winner can be handled with one round of voting. Results would be forwarded from the website to the UFOC and winners would then be announced to the faculty. The process is quite simple, easy to implement, and free.

A crucial element of this proposal is the voting tally process, called *Condorcet methods*. The computations are handled by the servers at Cornell's Computer Science Department, requiring no work on our part. Winners are determined by computing a simultaneous round robin in which each candidate is considered in a head-to-head election against every other candidate. The winner of each head-to-head pairing is determined by a simple majority of preferences. For example, if Alice is given a rank of 2 and Bob receives a 4, Alice would be awarded the vote on that ballot. Head-to-head preferences are calculated for each ballot then summed across all ballots. The election winner is the candidate preferred head-to-head to all other candidates on the majority of ballots. The runner up is the candidate preferred to all other candidates except the winner.*

This process represents a substantial improvement over the current one for the following reasons:

- 1. **No runoffs are required**. In the recent past, elections have dragged on for weeks. This can happen any time there are a number of candidates with limited support, or when there is a true three-way split for two positions. The Condorcet method proposed here returns a result instantly, with no need for run-offs even for multiple seat elections.
- 2. **Elections will be fairer**. Our current system requires that a candidate be eliminated if they have the fewest votes and no other candidate has reached a majority. This rule can lead to situations where a candidate who is a widely popular second choice is eliminated because s/he is only rarely a first choice. This could lead to the election of a candidate who is less preferable to a majority of voters than the candidate who was eliminated.
- 3. **Three way splits can be resolved.** In cases where three candidates are vying for two positions, current voting rules require repeated runoffs until one candidate reaches the 40% criterion. The proposed system resolves this seamlessly.
- 4. **Condorcet voting is technically preferable to our current method**. The Condorcet method is the only one that successfully achieves criteria developed by mathematicians for optimality in voting. A list and summary of those criteria is available here:

http://minguo.info/election_methods/evaluation

A peer-reviewed summary of this work can be found here:

^{*} It is unlikely but possible that there is no candidate preferred to all others using this method. In that case the candidate who is least preferred head-to-head is removed and the tally is retabulated. This repeats until a winner is determined.

Voting Procedures: A Summary Analysis
Hannu Nurmi
British Journal of Political Science, 13(2), 181-208
http://www.jstor.org/stable/193949

Potential Concerns

- 1. **Voting will be harder.** It is true that completing the initial ballot will be somewhat more difficult for preferential voting. However, the elimination of runoff ballots compensates for the effort.
- 2. **The system can be "gamed."** While any voting system can be used strategically, most of the common strategies are less useful in a preference system. For example, giving an artificially low rank to a moderately preferred candidate who is perceived to be a strong competitor to the most preferred candidate will not help the most preferred candidate. Because votes are tallied for head-to-head comparisons, the first choice candidate will get a single vote in either case. Mathematicians have demonstrated that Condorcet methods are not susceptible to this technique and that sincere voting is typically the most efficient way of obtaining results in line with one's preferences.
- 3. **It's hard to implement**. Fortunately, the Computer Science department at Cornell has established a free, secure, and reliable website for managing these types of elections. This site is fairly easy to use and will actually represent an improvement on current technology.
- 4. **How do voters express indifference?** More than one candidate can be given the same rank. For example, if there are four candidates and a voter really likes A, cannot abide B, and is indifferent between C & D, then they may rank the candidates A 1, B 3, C 2, D 2. This would have the effect of awarding a vote to A over all other candidates and B and C over D, but not distinguishing C and D. This perfectly reflects the voter's preferences.
- 5. **Elections will be "different" than they are now**. This is certainly true. They will be fairer. For example, a Condorcet candidate (i.e. one who wins any Condorcet method election) is the one who would beat any of the other candidates in a head-to-head election. Our current system does not always select such a candidate. It is therefore possible that a candidate who would lose an election to another candidate might still be selected under our current system. This seems unfair to the majority of voters who often prefer a candidate who is eliminated in a run-off to one who remains.

Further Reading

Condorcet Internet Voting Service documentation http://www.cs.cornell.edu/w8/~andru/civs/

Wikipedia entry for Condorcet method http://en.wikipedia.org/wiki/Condorcet_method

Condorcet Voting Explained

http://minguo.info/election_methods/condorcet/condorcet_voting_explained

Technical Evaluation of Election Methods

http://minguo.info/election_methods/evaluation