



# CITIZEN ADVOCACY CENTER

## Voting Systems: What is Fair?

### LESSON PLAN AND ACTIVITIES

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**Grade Level:** 9, 10, 11, 12

**Subject(s):**

- Social Studies: U.S., State, and Local Government; and
- Language Arts: Reading, Writing.

**Duration:** 1-2 class sessions

**Description:** This lesson explores plurality, cumulative and instant run-off voting systems and asks students to evaluate the pros and cons of each system and to consider which one best represents citizens in a democracy.

**Goals:**

Illinois Learning Standards

A. *Social Science:* 14A, 14B, 14C; 16A, 16B;

B. *Language Arts:* 1A, 1B; 3A, 3B, 3C; 4A, 4B; and

C. *Mathematics:* 7C; 8B, 8C, 8D.

**Objectives:**

1. Understand that a variety of voting systems exists;
2. Understand the different voting systems;
3. Understand how these voting systems are used;
4. Understand the pros and cons of each voting system;
5. Solve problems using the different voting systems; and
6. Evaluate why our local, state, and federal elections use particular voting styles.

**Materials:**

1. **Voting Systems** handout – pages 5 and 6; and
2. **Advantages/Disadvantages** handout page 7.

**Instruction and Activity:**

Who do you normally think of as the ‘winner’ of an election? How did that person win? Did that person win by a simple majority, receiving more than 50% of the votes? By a super-majority, receiving 2/3 or 3/5 of the votes? By a plurality, receiving more votes than any other candidate, but still less than 50%? By some other calculation?

First, let’s determine the most important criteria of a voting system. Then, we’ll try out different voting systems and evaluate whether they meet the criteria.

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Have students brainstorm what they think three or four main goals of a voting system should be.

Possible goals include:

- Decisive outcomes;
- Fair representation - a 'real' choice;
- Candidate competition;
- High voter turn-out;
- Diverse candidates; and
- Good discussion of important issues by the candidates.

Several voting systems exist and are common throughout the United States. Find a description of each of these below and go through the definitions and examples.

### **Types of voting systems:**

#### 1. Single-member District Plurality Voting (Winner-Take-All)

Whoever gets the most votes wins. One vote per voter. Plurality voting is what most people think of as an 'election.' It is a winner-take-all approach, even if the winner receives fewer than 50% of the total votes cast.

#### 2. Cumulative Voting

This system is based on multi-member districts. Voters get as many votes as there are open seats being decided in the election. For example, if there are three open seats to be decided in the election and six candidates vying for those seats, each voter may cast up to three votes, dividing them amongst the six candidates. Candidates win by plurality: in our example, the three candidates with the highest total vote counts would win. In Illinois, a cumulative system was used to elect the state legislature from 1870 through 1980, at which time the system was changed to plurality voting. Cumulative voting gives a greater voice to minority voters than they would otherwise have in a straight plurality vote.

#### 3. Proportional Representation Systems

Based on large, multi-member districts. Each party runs a number of candidates equal to the number of seats in the district. Voters indicate on the ballot which party they prefer and the parties then get seats in proportion to their share of the total vote.

#### 4. Choice Voting (Single Transferable Voting)

Based on multi-member districts. Voters rank candidates in order of preference (1st, 2nd, 3rd, etc.). Candidates must achieve a calculated threshold number of votes, dependent on the total number of votes cast in the election and the number of seats at issue, in order to be elected. In a somewhat complex process, successive tabulations are made in which votes are transferred from first to second to third ranked candidates until all the seats are successfully filled by candidates meeting the threshold number of votes. In the end, candidates with the most high rankings take the seats.

### **Activity -- Mock Classroom Election**

Ask for seven volunteers. They will be running in a mock election to choose four students to represent the class in Class Council. Each of the seven candidates, after a few minutes of

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preparation time, should give a short speech on why they should be elected and why they can best serve the interests of the students. The function of the student representative is to voice any student concerns to the teacher or the principal and to lobby for changes in the classroom that students may want.

Once the candidates have given their speeches, it is time for the class to vote. First, have the class (including the candidates) vote for one person to become president of the Class Council using a plurality voting system. Each student casts a vote for ONE candidate. The candidate with the most votes wins.

Next, have the class (including the candidates) vote for the remaining spots on the Class Council using a cumulative voting system. There will be six candidates remaining and three open seats. Each student gets three votes and may divide these votes however they see fit among the six candidates -- they may cast one vote for each of three candidates or they may cast three votes for one candidate or anything in between. The three candidates with the highest vote totals will win.

Finally, try a choice voting system in which students rank candidates in order of preference, 1st, 2nd, and 3rd. The three candidates with the most high rankings will win.

Possible variation: Divide the students into various 'special interest groups,' such as minorities, women, small business owners. Some students could represent multiple special interest groups: e.g. minority women who own small businesses. Other special interest groups could be individuals with disabilities, tobacco companies, developers, trial lawyers, environmentalists, etc. Try to divide the students into special interest groups in proportions that reflect real life. Then, have the students perform the different styles of voting, after giving the students in each interest group an opportunity to discuss the potential candidates before each vote. See how the special interest group dynamic affects the outcome of each vote and discuss.

### **Follow-up Discussion Questions**

Which way of voting did you prefer? Why?

Which voting method did you think was least 'fair'?

List advantages and disadvantages of each voting method. (See Handout)

What would happen if we had an 'instant run-off' system? Example: Three parties are the major players in an election. Two of these parties are the primary parties, while the third party is trying to gain popularity. The two primary parties complain that the third party is a 'spoiler': if the third-party candidate stays in the election, s/he pulls votes from one or both of the other parties.

What if you could vote for the third party candidate, knowing that if s/he does not garner a certain percentage of votes, your vote would automatically be transferred to another candidate of your choosing? Would this system eliminate the fear of the third-party candidate acting as a spoiler? What do third-party candidates add to an election? Does the fear of a third-party candidate spoiling an election prevent people from voting for that candidate?

## VOTING SYSTEMS

### Single-Member District Plurality Voting (Winner-Take-All)

Whoever gets the most votes wins the seat. An absolute majority of the vote is not required, only a plurality (i.e. more votes than any other candidates). One vote per voter.

Examples:

Two Candidates			Three Candidates		
Candidate	Votes Received	Winner	Candidate	Votes Received	Winner
#1	160	XXXX	#1	90	
#2	140		#2	110	XXXX
-----	-----		#3	100	

### Cumulative Voting

This system is used in multi-member districts. Voters have as many votes as there are seats to be filled. If there are six people running for three spots, each voter gets three votes and can allocate those votes among the six candidates however they choose. The candidates win by plurality: the top vote-getters in order win the seats until all the seats are filled. In our example, the top three vote-getters will win election.

Candidate	Voter A	Voter B	Voter C	Voter D	Total Votes	Winners
#1	1 vote				1 vote	
#2					0 votes	
#3	1 vote	2 votes	1 vote		4 votes	XXXXX
#4		1 vote	2 votes		3 votes	XXXXX
#5	1 vote				1 vote	
#6				3 votes	3 votes	XXXXX

Voters B and C were able to pool their votes to get their desired two candidates into office. Voter D pooled his votes to get his favorite candidate elected. In cumulative voting systems, pooling votes can be helpful to give minority groups a greater voice.

**Proportional Representation Systems** - This system may be used in large multi-member districts. Each party runs a number of candidates equal to the number of seats in the district.

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Voters indicate which party they prefer and the parties then get seats in the proportion to their share of the total vote. For example, a district has six seats. Republicans, Democrats and Independents each run six candidates as a group. Voters vote for one of the parties, not for any particular individual. Each party will receive a number of seats dependent on the percentage of votes that they won.

	<b>Republicans</b> Candidate A Candidate B Candidate C Candidate D Candidate E Candidate F	<b>Democrats</b> Candidate M Candidate N Candidate O Candidate P Candidate Q Candidate R	<b>Independents</b> Candidate U Candidate V Candidate W Candidate X Candidate Y Candidate Z
Votes received	16	34	50
Percentage won	16% (1/6)	34% (1/3)	50% (1/2)
Number of seats	1 seat (Candidate A)	2 seats (Candidate M) (Candidate N)	3 seats (Candidate U) (Candidate V) (Candidate W)

### Choice Voting

This system is based on multi-member districts. Voters rank candidates in order of preference (1st, 2nd, 3rd, etc.). Tallying winners can occur in various ways, depending on whether, for instance, votes for non-successful candidates get redistributed over to the voters' next choice. For a simple example, though, determine winners based on the candidates receiving the most high rankings. (First winner is the candidate garnering the most first place votes, second winner is the candidate garnering the most second place votes, etc.).

In this example, there are three seats available and five candidates running:

Candidates	Voter A	Voter B	Voter C	Voter D	Voter E	Winners
Candidate A	2nd	3rd	5th	2nd	2nd	Winner #2
Candidate B	1st	5th	4th	3rd	5th	
Candidate C	3rd	2nd	3rd	1st	3rd	Winner #3
Candidate D	4th	4th	2nd	4th	4th	
Candidate E	5th	1st	1st	5th	1st	Winner #1

Candidate E had the most 1st place votes, Candidate A the most 2nd place votes, and Candidate C the most 3rd place votes.

## Voting System Advantages and Disadvantages

VOTING SYSTEM	ADVANTAGES	DISADVANTAGES
Plurality/Winner-Take-All	<ul style="list-style-type: none"> <li>• Fairness: Highest vote-getter wins</li> <li>• Best for two-candidate races</li> <li>• Easy to build coalitions</li> </ul>	<ul style="list-style-type: none"> <li>• Losing candidates win nothing, even if they get 49% of the vote</li> <li>• In a race of three or more candidates, over 50% may oppose the candidate who wins</li> <li>• Fewer minority candidates can win</li> </ul>
Cumulative voting	<ul style="list-style-type: none"> <li>• May increase minority representation because minority voters can stack their votes in favor of one candidate</li> <li>• More choices for voters</li> <li>• Relatively easy to understand</li> <li>• More competition is possible, stimulating possibly higher voter turnout</li> </ul>	<ul style="list-style-type: none"> <li>• Splitting votes is not always best for representation. Splitting votes may cause candidates to lose, whereas concentrating votes may mean losing a useful vote for another candidate</li> <li>• Harder to build coalitions</li> </ul>
Choice/preference	<ul style="list-style-type: none"> <li>• Majorities and minorities win in proportion to their strength</li> <li>• Easy to administer</li> <li>• More candidates may run</li> </ul>	<ul style="list-style-type: none"> <li>• Harder to count the votes</li> <li>• Like-minded candidates end up competing against each other - primary and general election in one</li> </ul>
Proportional representation	<ul style="list-style-type: none"> <li>• Legislature 'mirrors' the preference of the population</li> <li>• 'Will of the majority' better represented</li> </ul>	<ul style="list-style-type: none"> <li>• Can lead to legislative gridlock</li> <li>• Small parties may have too much power in a coalition</li> </ul>

Source: Center for Voting and Democracy, <http://www.fairvote.com>  
<http://www.fairvote.org/plurality-voting-rule-is-the-real-election-spoiler>  
<http://www.lib.niu.edu/1980/ii801202.html>  
<http://www.lwvoakland.org/rankedquest.html>  
<http://www.mtholyoke.edu/acad/polit/damy/BeginnningReading/PRsystems.htm>

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