

Problem Solving (A3) Report

Topic: Elections Ballots in Puerto Rico  
Date: August 19, 2020  
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1. Identify a Problem

PLAN

In Puerto Rico, most people do not know or get confused voting for candidacy, instead they vote for the whole party. When some try to vote for candidacy, they do it wrong and their vote gets invalid.

2016 Puerto Rico Elections: List of full votes and other votes for candidates for governor

Totales por Distrito Senatorial	David Bernier (PPD)			Ricardo Rosselló Nevares (PNP)			Maria De Lourdes Santiago (PIP)		
	Integros	Otros	Total	Integros	Otros	Total	Integros	Otros	Total
SAN JUAN I	55,603	11,554	67,157	62,813	8,149	70,962	3,672	2,390	6,062
BAYAMÓN II	52,624	11,758	64,382	68,873	9,429	78,302	2,595	1,449	4,044
ARECIBO III	68,998	9,788	78,786	84,765	10,221	94,986	2,275	1,082	3,357
MAYAGÜEZ IV	71,227	10,707	81,934	78,067	9,838	87,905	2,935	1,267	4,202
PONCE V	70,625	10,435	81,060	77,543	9,748	87,291	3,214	1,333	4,547
GUAYAMA VI	80,877	11,608	92,485	81,848	7,904	89,752	2,726	1,081	3,807
HUMACAO VII	68,749	11,713	80,462	69,798	8,863	78,661	2,627	1,247	3,874
CAROLINA VIII	56,879	11,045	67,924	62,167	10,484	72,651	2,417	1,419	3,836
Totales Isla	525,582	88,608	614,190	585,874	74,636	660,510	22,461	11,268	33,729

Totales por Distrito Senatorial	Rafael Bernabe Riefkohl (PPT)			Manuel Cidre (INDPTE)			Alexandra Lúgaro (INDPTE)		
	Integros	Otros	Total	Integros	Otros	Total	Integros	Otros	Total
SAN JUAN I	800	613	1,413	0	12,648	12,648	0	23,083	23,083
BAYAMÓN II	430	347	777	0	13,192	13,192	0	24,437	24,437
ARECIBO III	229	195	424	0	13,597	13,597	0	19,087	19,087
MAYAGÜEZ IV	266	231	497	0	10,064	10,064	0	24,382	24,382
PONCE V	337	212	549	0	9,688	9,688	0	20,612	20,612
GUAYAMA VI	209	180	389	0	8,499	8,499	0	20,613	20,613
HUMACAO VII	357	284	641	0	11,204	11,204	0	22,262	22,262
CAROLINA VIII	404	336	740	0	11,602	11,602	0	21,355	21,355
Totales Isla	3,032	2,398	5,430	0	90,494	90,494	0	175,831	175,831

In this table we can see that lots of people vote for the whole party rather than for candidacy. This happened because most people are scare to ruin their ballots trying to vote for candidacy, so they vote for the whole party (full votes).

Between the state, legislative and municipal ballots 27,000 ballots were invalid.

2. Set the Target

PLAN

- Website that lets people practice voting.
- People learn how to vote for candidacy or mixed.
- More people vote for candidacy or does a mixed vote, rather than voting for the whole party.
- The margin for error gets reduced with practice.
- The numbers of invalid votes get reduced.
- The number of candidacy votes increased.

3. Analyze the Causes

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- People do not want their ballot to be invalid.
- People do not know how to vote correctly for candidacy or mixed.
- This problem occurs because no one teaches the people how to vote.
- If people learn and practice how to vote, they will not rely on only voting for the party, instead they will vote for whoever they want feeling secure that there votes will not be invalidated.

4. Propose & Implement Countermeasures

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- Find a way to teach people how to vote and practice on it. Without practice people will not fully understand the voting process.
- Creating a website that lets the users practice voting with election ballots of their respective districts.
- If a user does an invalid ballot the program will identify the error and will indicate why the ballot is invalid to the user.
- There results will be saved for people to see their past errors and learn from it.

5. Check/Evaluate

CHECK

6. Act and/or Standardize

ACT