**Public Information, Public Learning, and Public Opinion:**

**Democratic Accountability in Education Policy**

**Appendix: Survey Details**

Between October 38, 2011 and November 5, 2011, 1,500 Tennessee adults (one randomly selected in each household) were surveyed. The AAPOR cooperation rate (COOP3) for the survey was 61.12%, and the AAPR response rate (RR3) was 6.03%. Each landline number in the sample was called up to five times in an attempt to get a completed interview by the call center RDD Field Services. Interviews were conducted on 10/28, 10/29, 10/30, 11/2, 11/3, 11/4, and 11/5. All adults were eligible for inclusion, and the script asked for the adult with the birthday closest to the calling date to randomize within households.

All respondents were given the same survey, but the portion dealing with education policy was randomized at the individual level. The full survey and dataset are available on the authors' webpages. A full replication dataset is also available on the authors' webpages.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Treatment 1** | **Treatment 2** | **Treatment 3** | **Treatment 4** | **Control** |
| **Kids in School?** | .29(.03) | .33(.03) | .32(.03) | .33(.03) | .36(.04) |
| **Avg. Ideology** | 1.21(.14) | 1.09(.13) | .75(.10) | 1.07(.13) | 1.19(.20) |
| **Avg. Age** | 53.77(.91) | 53.54(.88) | 52.16(.89) | 52.79(.92) | 48.43(1.26) |
| **Avg. Schooling** | 3.76(.08) | 3.54(.08) | 3.70(.09) | 3.57(.09) | 3.69(.13) |
| **% Female** | .50(.028) | .52(.03) | .49(.03) | .51(.03) | .41(.04) |
| **% Republican** | .26(.02) | .24(.02) | .30(.03) | .30(.02) | .30(.04) |
| **% Democratic** | .34(.03) | .37(.03) | .32(.03) | .32(.03) | .26(.04) |
| **% Black** | .19(.02) | .23(.02) | .18(.02) | .21(.02) | .10(.02) |
| **Sample Size** | 330 | 345 | 330 | 345 | 150 |

**Table A0: Demographic Composition of Treatments:** Standard error of mean reported in parentheses.

Table A0 reports the demographic composition of the randomly assigned treatment according to several covariates of interest. As expected, given the random assignment, there is no evidence of systematic bias in the composition of the treatment groups. Given the 40 estimates reported above, there are occasional differences, but there is evidence that the randomization failed and that the differences are not simply spurious and resulting from chance alone. Of course, because the randomization occurs at the individual level, traits that are correlated within individuals (e.g. race and partisanship) may exhibit correlated differences as well.

Examining pre-treatment covariate balance by using a multinomial logit to predict the treatment group as a function of thirteen demographic indicators and variables reveals a similar pattern – of the 52 estimated coefficients, only three are distinguishable from zero using a two-tailed test at conventional significance levels (.05).

Despite the fact that no evidence suggests that there are systematic differences in the composition of the treatments, in the analysis that follows, we nonetheless control for these characteristics to minimize any differences that the few differences may produce.

**Appendix Figure A1: Re-Estimating the Effect of Updating Prior Beliefs on Citizens’ Evaluations of Educational Institutions (Ordinary Least Squares)**

|  |  |
| --- | --- |
|  |  |
| *A1a: Average Grade Assigned to Tennessee Schools* | *A1b: Average Grade Assigned to Tennessee Department of Education* |
|  |  |
| *A1c: Average Grade Assigned to Local School Board* |  |

 The panels of Appendix Figure 1 show the predictive margins for the treatment and control groups in the performance experiment for Tennessee schools, the Tennessee Department of Education and the local school board, respectively. These margins are calculated by re-estimating equation 1 using ordinary least squares (OLS) instead of ordered probit estimation, which was used in the main text. Comparing this figure to Figure 2, which illustrates the margins of the probability of assigning a grade of A to each institution derived from the ordered probit estimates, shows very similar patterns.

**Appendix Table A1: Issue Importance as a Moderator between Information and Evaluations of Institutions**

|  |  |  |
| --- | --- | --- |
| *Grade for:* | **Tennessee Schools** | **TN Dept. of Ed.** |
| *Issue Importance Measure:* | Children in School | Home-owner | Says Education Should Be Top Priority | Children in School | Home-owner | Says Education Should Be Top Priority |
|   | (1) | (2) | (3) | (4) | (5) | (6) |
| Performance guess: |  |  |  |  |  |  |
| 20-39% | 0.002 | 0.395 | 0.262 | -0.096 | 0.446 | 0.255 |
|  | (0.234) | (0.442) | (0.224) | (0.242) | (0.452) | (0.231) |
| 40-59% | 0.157 | -0.502 | 0.369\* | 0.278 | -0.233 | 0.436\* |
|  | (0.227) | (0.416) | (0.216) | (0.234) | (0.414) | (0.223) |
| 60-79% | 0.359 | 0.185 | 0.487\*\* | 0.567\*\* | 0.561 | 0.762\*\*\* |
|  | (0.232) | (0.391) | (0.220) | (0.240) | (0.394) | (0.227) |
| 80-100% | 0.674\* | -0.171 | 0.908\*\*\* | 1.586\*\*\* | 0.524 | 1.590\*\*\* |
|  | (0.408) | (0.506) | (0.300) | (0.403) | (0.501) | (0.304) |
| Don't Know | 0.080 | -0.449 | 0.313 | 0.276 | -0.007 | 0.546\*\* |
|  | (0.249) | (0.455) | (0.243) | (0.259) | (0.478) | (0.254) |
| Received performance update | -0.551\*\*\* | -0.922\*\*\* | -0.565\*\*\* | -0.296\*\* | -0.897\*\*\* | -0.368\*\*\* |
|  | (0.121) | (0.238) | (0.108) | (0.121) | (0.244) | (0.108) |
| Importance Measure | -0.242 | -0.829\*\* | 0.219 | -0.186 | -0.824\*\* | 0.298 |
|  | (0.430) | (0.407) | (0.471) | (0.435) | (0.413) | (0.473) |
| Importance Measure x Received performance update | -0.023 | 0.449\* | 0.113 | -0.257 | 0.635\*\* | -0.024 |
|  | (0.206) | (0.260) | (0.251) | (0.208) | (0.267) | (0.254) |
| Importance Measure x Performance guess: |  |  |  |  |  |  |
| 20-39% | 0.626 | -0.167 | -0.623 | 0.922\* | -0.240 | -0.451 |
|  | (0.472) | (0.498) | (0.531) | (0.480) | (0.510) | (0.541) |
| 40-59% | 0.454 | 0.957\*\* | -0.688 | 0.332 | 0.737 | -0.475 |
|  | (0.453) | (0.473) | (0.509) | (0.459) | (0.475) | (0.512) |
| 60-79% | 0.521 | 0.447 | -0.080 | 0.451 | 0.199 | -0.532 |
|  | (0.463) | (0.455) | (0.517) | (0.469) | (0.460) | (0.520) |
| 80-100% | 0.709 | 1.604\*\*\* | 0.147 | -0.008 | 1.272\*\* | -1.854\*\* |
|  | (0.610) | (0.609) | (0.830) | (0.605) | (0.603) | (0.817) |
| Don't Know | 0.803 | 0.937\* | -0.436 | 1.101\*\* | 0.685 | -0.294 |
|  | (0.548) | (0.522) | (0.602) | (0.554) | (0.549) | (0.593) |
| Observations | 511 | 511 | 510 | 499 | 499 | 498 |
| Pseudo R-squared | 0.063 | 0.075 | 0.066 | 0.084 | 0.088 | 0.080 |

**Appendix Table A1 (cont’d): Issue Importance as a Moderator between Information and Evaluations of Institutions**

|  |  |
| --- | --- |
| *Grade for:* | **Local School Board** |
| *Issue Importance Measure:* | Children in School | Home-owner | Says Education Should Be Top Priority |
|   | (7) | (8) | (9) |
| Performance guess: |  |  |  |
| 20-39% | 0.028 | 0.136 | 0.346 |
|  | (0.237) | (0.452) | (0.229) |
| 40-59% | -0.008 | -0.039 | 0.364\* |
|  | (0.226) | (0.434) | (0.220) |
| 60-79% | 0.505\*\* | 0.324 | 0.736\*\*\* |
|  | (0.234) | (0.412) | (0.225) |
| 80-100% | 0.543 | -0.314 | 0.692\*\* |
|  | (0.386) | (0.520) | (0.295) |
| Don't Know | 0.219 | -0.082 | 0.525\*\* |
|  | (0.247) | (0.473) | (0.245) |
| Received performance update | -0.202\* | -0.533\*\* | -0.284\*\*\* |
|  | (0.121) | (0.246) | (0.107) |
| Importance Measure | -0.305 | -0.900\*\* | 0.658 |
|  | (0.452) | (0.420) | (0.480) |
| Importance Measure x Received performance update | -0.117 | 0.347 | 0.152 |
|  | (0.205) | (0.268) | (0.255) |
| Importance Measure x Performance guess: |  |  |  |
| 20-39% | 0.640 | 0.087 | -0.888\* |
|  | (0.495) | (0.508) | (0.540) |
| 40-59% | 0.795\* | 0.319 | -0.908\* |
|  | (0.475) | (0.488) | (0.514) |
| 60-79% | 0.442 | 0.346 | -0.885\* |
|  | (0.486) | (0.473) | (0.523) |
| 80-100% | 0.047 | 0.904 | -7.089 |
|  | (0.610) | (0.613) | (82.107) |
| Don't Know | 1.250\*\* | 0.691 | -0.276 |
|  | (0.570) | (0.537) | (0.614) |
| Observations | 500 | 500 | 499 |
| Pseudo R-squared | 0.047 | 0.045 | 0.055 |

**Appendix Table A2: Equity Prime, Equity Information Update, and Support for Education Policy Reform**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Support for:* | Teacher Performance Pay | No Child Left Behind | State-Provided Pre-Kindergarten | Private School Vouchers | Charter Schools | Higher Pay for Teachers in Low-Income Schools |
|   | (1) | (2) | (3) | (4) | (5) | (6) |
| Condition 3: Received Overall Performance Prime and Update | 0.01 | -0.07 | 0.18 | -0.10 | -0.04 | -0.02 |
|  | (0.12) | (0.12) | (0.13) | (0.12) | (0.12) | (0.12) |
| Condition 4: Received Performance and Equity Prime | -0.00 | -0.08 | 0.01 | 0.05 | -0.21\* | -0.11 |
|  | (0.12) | (0.12) | (0.12) | (0.12) | (0.12) | (0.12) |
| Condition 5: Received Performance and Equity Prime and Update | -0.07 | -0.01 | 0.09 | 0.13 | 0.17 | 0.13 |
|  | (0.12) | (0.12) | (0.12) | (0.12) | (0.12) | (0.12) |
| Performance guess: |  |  |  |  |  |  |
| 20-39% | -0.22 | -0.16 | -0.10 | -0.41\*\* | -0.09 | 0.09 |
|  | (0.18) | (0.18) | (0.20) | (0.17) | (0.18) | (0.17) |
| 40-59% | -0.15 | -0.10 | -0.07 | -0.54\*\*\* | -0.26 | -0.12 |
|  | (0.17) | (0.17) | (0.19) | (0.17) | (0.18) | (0.17) |
| 60-79% | -0.28 | 0.04 | -0.06 | -0.63\*\*\* | -0.30\* | -0.04 |
|  | (0.18) | (0.18) | (0.19) | (0.17) | (0.18) | (0.17) |
| 80-100% | 0.13 | 0.14 | 0.19 | -0.45\* | -0.10 | -0.15 |
|  | (0.24) | (0.25) | (0.28) | (0.24) | (0.24) | (0.24) |
| Don't Know | -0.12 | 0.01 | -0.11 | -0.35\* | -0.09 | -0.12 |
|  | (0.19) | (0.19) | (0.21) | (0.19) | (0.19) | (0.19) |
| *p*-value from test of equality of coefficients for Conditions 4 and 5 | 0.55 | 0.55 | 0.53 | 0.48 | 0.002 | 0.04 |
| *p*-value from test of equality of coefficients for Conditions 3 and 5 | 0.49 | 0.58 | 0.45 | 0.06 | 0.08 | 0.21 |
| Observations | 980 | 966 | 994 | 1028 | 963 | 1009 |
| Pseudo R-squared | 0.045 | 0.090 | 0.113 | 0.074 | 0.070 | 0.056 |
| *Ordered probit coefficients shown. Models run on pooled sample from Conditions 2 through 5. Models also condition on control variables. Standard errors in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.* |
|

**Appendix B: Policy Questions**

Should teachers whose students do well on tests get paid more than teachers whose students do poorly on those tests?

Yes 1

No 2

Don’t know 8

Decline to Answer 9

Congress may vote on whether or not to reauthorize the No Child Left Behind Act in the next few months. Do you think Congress should reauthorize No Child Left Behind in a form close to its current one?

Yes 1

No 2

Don’t know 8

Decline to Answer 9

Should the state of Tennessee spend more money to expand its voluntary pre-K program?

Yes 1

No 2

Don’t know 8

Decline to Answer 9

Should the state of Tennessee provide publicly-funded tuition vouchers for families to send their children to private schools?

Yes 1

No 2

Don’t know 8

Decline to Answer 9

Should Tennessee have more charter schools, which are independently-run public schools that operate under fewer restrictions than traditional public schools?

Yes 1

No 2

Don’t know 8

Decline to Answer 9

Should Tennessee pay higher salaries to teachers who work in schools with large low-income populations?

Yes 1

No 2

Don’t know 8

Decline to Answer 9