Appendix A
Republican and Democratic Public Opinion on Colleges and Universities and Statements by Political Elites on Further Education.

Opinions on Colleges and Universities by Party

Between 2010 and 2017 the percentage of Republicans who say “colleges and universities have a negative impact on the country,” increased from 32% to 58% between 2010 and 2017, while among Democrats that percentage declined from 36% to 19% (Pew Research Center, 2017).

Statements by Political Elites

| Table A1: Statements by Democrats | Statement |
|----------------------------------|-----------|
| Source                           | Statement                                                                 |
| Hillary Clinton, presidential candidate (as cited in Meckler & Huges, 2016). | It is imperative that the next president put forward a bold plan to make debt-free college available to all.” |
| Vermont Senator Bernie Sanders after introducing a 2017 bill in Congress that would enact free tuition at two-year and four-year institutions alike (as cited in O’hara, 2017) | “If we are to succeed in a highly competitive global economy and have the best-educated workforce in the world, public colleges and universities must become tuition-free for working families and we must substantially reduce student debt.” |
| 2016 Democratic Party Platform   | “Democrats believe that in America, if you want a higher education, you should always be able to get one: money should never stand in the way. Cost should not be a barrier to getting a degree or credential, and debt should not hold you back after you graduate. Bold new investments by the federal government, coupled with states reinvesting in higher education and colleges holding the line on costs, will ensure that Americans of all backgrounds will be prepared for the jobs and economy of the future. Democrats are unified in their strong belief that every student should be able to go to college debt-free, and working families should not have to pay any tuition to go to public colleges and universities. We will also make community college free.” |
Table A2: Statements by Republicans

| Source                                                                 | Statement                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Republican Platform 2016                                              | We need new systems of learning to compete with traditional four-year schools: Technical institutions, online universities, life-long learning, and work-based learning in the private sector. Public policy should advance their affordability, innovation, and transparency and should recognize that a four-year degree from a brick-and-mortar institution is not the only path toward a prosperous and fulfilling career. |
| Donald Trump, president, speaking at Gateway Technical College, Kenosha, Wisconsin April 2017 (as cited in Schwartz, 2017). | “Vocational education is the way of the future.”                                                                                                                                                                                                                                                                                                                  |
| Elaine Chao, Secretary of Transportation, (as cited in Nagurka, 2017). | “The good news is that workers don’t need an expensive 4-year degree to access those good-paying jobs.”                                                                                                                                                                                                                                               |
| Donald Trump, president, State of the Union Address (as cited in Stratford, 2018).                                   | Congress should “invest in workforce development and job training” and “open great vocational schools.”                                                                                                                                                                                |
| Donald Trump, President. Annual Congressional Republican policy retreat, Sulpher Springs, West Virginia (as cited in Green, 2018). | “We should have vocational schools. . . . You learn bricklaying and carpentry and all of these things. We don’t have that very much anymore. And I think the word ‘vocational’ is a much better word than in many cases, a community college. A lot of people don’t know what a community college means or represents.” |
Appendix A References

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### Appendix B

**Experimental Design and Survey Questionnaire**

Table B1: Main Survey and Experimental Design

|                     | No Costs Information                                                                 | Providing Costs Information                                                                 |
|---------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| **No Returns**      | Thinking about your oldest child under the age of 18 (If you had a child of college-going age), do you want that child to go to a community college to earn a two-year degree, a university to earn a four-year degree, or neither? | On average, it costs $14,210 per year to complete a four-year degree at an in-state public university, while it costs $7,620 per year to complete a two-year degree at a local community college. These are average costs (including tuition, fees, and room and board) after deducting the amount that students typically receive in scholarships and grants. Thinking about your oldest child under the age of 18 (If you had a child of college-going age), do you want that child to go to a community college to earn a two-year degree, a university to earn a four-year degree, or neither? |
| **Providing Returns** | On average, students completing a four-year degree earn $61,400 each year over the course of their working lives, while those completing a two-year degree earn $46,000 each year over the course of their working lives. Thinking about your oldest child under the age of 18 (If you had a child of college-going age), do you want that child to go to a community college to earn a two-year degree, a university to earn a four-year degree, or neither? | On average, students completing a four-year degree earn $61,400 each year over the course of their working lives, while those completing a two-year degree earn $46,000 each year over the course of their working lives. On average, it costs $14,210 per year to complete a four-year degree at an in-state public university, while it costs $7,620 per year to complete a two-year degree at a local community college. These are average costs (including tuition, fees, and room and board) after deducting the amount that students typically receive in scholarships and grants. Thinking about your oldest child under the age of 18 (If you had a child of college-going age), do you want that child to go to a community college to earn a two-year degree, a university to earn a four-year degree, or neither? |

Note: Parents with children ages 0 to 17 are asked to think about their oldest child under the age of 18. Other adults are asked to consider a hypothetical child of college-going age.
Appendix C

Multinomial Logit Results

Table C1: Multinomial Logit Estimates of Information Treatment Effects for US Adults by Parent Status

| Outcome Category | Two-Year College | No Postsecondary Education |
|------------------|------------------|-----------------------------|
|                  | (1)              | (2)                         | (3)              | (4)              |
| **Subgroup Difference** |                  |                              |                  |
| Other Adults     | 0.116**          | 0.081*                      | 0.045*           | 0.040            |
|                  | (0.029)          | (0.033)                     | (0.026)          | (0.031)          |
| Cost and Returns |                  |                              |                  |
| Costs and Returns Treatment | 0.052       | 0.050                        | 0.018            | 0.023            |
|                  | (0.036)          | (0.035)                     | (0.030)          | (0.032)          |
| Costs and Returns \times Other Adults | -0.066-0.065 | 0.004                        | -0.008           |
|                  | (0.047)          | (0.045)                     |                  |
| Costs Only       |                  |                              |                  |
| Costs Treatment  | 0.070*           | 0.065*                      | 0.028            | 0.032            |
|                  | (0.038)          | (0.038)                     | (0.032)          | (0.033)          |
| Costs \times Other Adults | -0.035       | -0.025                       | 0.001            | 0.004            |
|                  | (0.047)          | (0.046)                     | (0.042)          | (0.042)          |
| Returns Only     |                  |                              |                  |
| Returns Treatment| -0.032           | -0.040                      | 0.018            | 0.026            |
|                  | (0.035)          | (0.033)                     | (0.032)          | (0.032)          |
| Returns \times Other Adults | -0.094-0.092  | 0.013                        | 0.007            |
|                  | (0.054)          | (0.051)                     | (0.044)          | (0.042)          |
| Includes Control Variables | x       |                              | x                |

Notes: N = 4,204; 2,166 parents and 2,038 other adults. Other adults refer to respondents who are not parents of children ages 0-17. Marginal effects shown. Omitted outcome category is preference for four-year university. Sampling weights included. Heteroskedastic robust standard errors used. **, *, and + indicate the coefficient is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively. Superscript letters a, b, and c indicate that the treatment effect for other adults is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively.
Table C2: Multinomial Logit Estimates of Information Effects by Household Income

| Panel A: Subgroup Difference | Two Year College | No Postsecondary Education |
|------------------------------|------------------|---------------------------|
|                              | (1)              | (2)                       | (3)   | (4)   |
| **Outcome Category**         | ^                 |                          |       |       |
| Two Year College             | 0.029            | -0.023                    | 0.099* | 0.025 |
|                              | (0.048)          | (0.046)                   | (0.044) | (0.044) |
| No Postsecondary Education   | 0.092*           | 0.041                     | 0.174** | 0.001 |
|                              | (0.050)          | (0.063)                   | (0.046) | (0.050) |

**Panel B: Cost and Returns**

| Costs and Returns Treatment | -0.077           | -0.085                     | 0.023 | 0.004 |
|                            | (0.064)          | (0.060)                   | (0.060) | (0.060) |
| Costs and Returns × Middle Income | 0.096           | 0.115*                     | 0.014 | 0.029 |
|                            | (0.072)          | (0.068)                   | (0.068) | (0.067) |
| Costs and Returns × Low Income | 0.101           | 0.095                     | -0.006 | 0.012 |
|                            | (0.077)          | (0.072)                   | (0.069) | (0.068) |

**Panel C: Costs Only**

| Cost Treatment              | 0.047            | 0.044                     | 0.023 | 0.029 |
|                            | (0.053)          | (0.051)                   | (0.058) | (0.057) |
| Costs × Middle Income       | 0.029            | 0.033                     | -0.001 | -0.013 |
|                            | (0.064)          | (0.060)                   | (0.066) | (0.064) |
| Costs × Low Income          | -0.072           | -0.069                    | 0.037 | 0.036 |
|                            | (0.070)          | (0.068)                   | (0.067) | (0.066) |

**Panel D: Returns Only**

| Returns Treatment           | -0.092           | -0.101*                    | 0.072 | 0.054 |
|                            | (0.067)          | (0.060)                   | (0.055) | (0.054) |
| Returns × Middle Income     | -0.032           | -0.016                    | -0.043 | -0.027 |
|                            | (0.079)          | (0.073)                   | (0.064) | (0.062) |
| Returns × Low Income        | -0.024           | -0.037                    | -0.048 | -0.015 |
|                            | (0.081)          | (0.076)                   | (0.066) | (0.064) |

**Notes:** N = 4,204; 971 low-income households; 2,056 medium income households, 1,177 high-income households. Middle income household earn between $35,000 and $100,000. Low income household earn less than $35,000. Marginal effects shown. Omitted outcome category is preference for four-year university. Sampling weights included. Heteroskedastic robust standard errors used. ***, *, and + indicate the coefficient is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively. Superscript letters a, b, and c indicate that the treatment effect for middle- or low-income is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively.
Table C3: Multinomial Logit Estimates of Information Effects by Educational Attainment

| Outcome Category | Two Year College | No Postsecondary Education |
|------------------|-----------------|----------------------------|
|                  | (1)     | (2)     | (3)     | (4)     |
| **Panel A: Subgroup Difference** |         |         |         |         |
| Some College     | 0.181** | 0.188** | 0.100*  | 0.066   |
|                  | (0.045) | (0.050) | (0.044) | (0.048) |
| No College       | 0.219** | 0.244** | 0.144** | 0.081*  |
|                  | (0.044) | (0.052) | (0.041) | (0.046) |
| **Panel B: Cost and Returns** |         |         |         |         |
| Costs and Returns Treatment | 0.005   | -0.007  | -0.038  | -0.042  |
|                  | (0.049) | (0.047) | (0.045) | (0.044) |
| Costs and Returns × Some College | 0.001   | 0.012   | 0.032   | 0.037   |
|                  | (0.063) | (0.061) | (0.061) | (0.058) |
| Costs and Returns × No College | -0.005  | 0.008   | 0.083   | 0.086*  |
|                  | (0.061) | (0.059) | (0.054) | (0.052) |
| **Panel C: Costs Only** |         |         |         |         |
| Cost Treatment   | 0.074   | 0.064   | 0.015   | 0.012   |
|                  | (0.047) | (0.047) | (0.049) | (0.048) |
| Costs × Some College | -0.009  | 0.008   | -0.014  | -0.017  |
|                  | (0.061) | (0.060) | (0.062) | (0.060) |
| Costs × No College | -0.062  | -0.052  | 0.038   | 0.049   |
|                  | (0.061) | (0.060) | (0.057) | (0.055) |
| **Panel D: Returns Only** |         |         |         |         |
| Returns Treatment | -0.103+ | -0.112+ | -0.025  | -0.019  |
|                  | (0.060) | (0.058) | (0.049) | (0.048) |
| Returns × Some College | 0.013   | 0.026   | 0.029   | 0.021   |
|                  | (0.074) | (0.072) | (0.064) | (0.061) |
| Returns × No College | -0.026  | -0.026  | 0.073   | 0.079   |
|                  | (0.074) | (0.072) | (0.058) | (0.055) |
| Includes Control Variables | x       |         | x       |         |

Notes: N = 4,204.; 1,036 respondents without a college degree; 1,172 respondents with some college experience; 1,996 respondents with at least a B.A. degree Marginal effects shown. Omitted outcome category is preference for four-year university. Sampling weights included. Heteroskedastic robust standard errors used. **, *, and + indicate the coefficient is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively. Superscript letters a, b, and c indicate that the treatment effect for respondents who attended some college or did not attend college is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively.
Table C4: Multinomial Logit Estimates of Information Effects by Racial/Ethnic Background

| Outcome Category | Two Year College | No Postsecondary Education |
|------------------|------------------|-----------------------------|
|                  | (1)              | (2)                         | (3)              | (4)              |
| **Panel A: Subgroup Difference** |                  |                             |                  |
| Hispanic         | 0.068            | 0.051                       | 0.077*           | 0.003            |
|                  | (0.044)          | (0.043)                     | (0.035)          | (0.035)          |
| African American | -0.116           | -0.079                      | 0.018            | -0.014           |
|                  | (0.071)          | (0.070)                     | (0.074)          | (0.064)          |
| **Panel B: Cost and Returns** |                  |                             |                  |
| Costs and Returns Treatment | 0.001            | 0.002                       | 0.031            | 0.019            |
|                  | (0.028)          | (0.027)                     | (0.027)          | (0.025)          |
| Costs and Returns × Hispanic | -0.175**         | -0.157*                     | -0.006           | 0.028            |
|                  | (0.066)          | (0.061)                     | (0.052)          | (0.049)          |
| Costs and Returns × African American | 0.229*           | 0.199*                      | -0.046           | -0.040           |
|                  | (0.095)          | (0.089)                     | (0.097)          | (0.091)          |
| **Panel C: Cost Only** |                  |                             |                  |
| Cost Treatment   | 0.046            | 0.048*                      | 0.045*           | 0.044*           |
|                  | (0.028)          | (0.027)                     | (0.027)          | (0.024)          |
| Costs × Hispanic | -0.065           | -0.051                      | -0.063           | -0.027           |
|                  | (0.062)          | (0.059)                     | (0.050)          | (0.048)          |
| Costs × African American | 0.068            | 0.064                       | -0.012           | -0.013           |
|                  | (0.102)          | (0.097)                     | (0.097)          | (0.091)          |
| **Panel D: Returns Only** |                  |                             |                  |
| Returns Treatment | -0.108**         | -0.118**                    | 0.050*           | 0.045*           |
|                  | (0.033)          | (0.031)                     | (0.027)          | (0.025)          |
| Returns × Hispanic | 0.002            | 0.030                       | -0.116*          | -0.088           |
|                  | (0.071)          | (0.067)                     | (0.057)          | (0.054)          |
| Returns × African American | -0.014           | -0.020                      | 0.019            | 0.049            |
|                  | (0.132)          | (0.121)                     | (0.092)          | (0.079)          |
| Includes Controls | x                |                             | x                |                  |

Notes: N = 4,204; 810 Hispanics, 261 African Americans; 2,892 Whites. Marginal effects shown. Omitted outcome category is preference for four-year university. Sampling weights included. Heteroskedastic robust standard errors used. **, *, and + indicate the coefficient is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively. Superscript letters a, b, and c indicate that the treatment effect for Hispanics or African Americans is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively.
Table C5: Multinomial Logit Estimates of Information Effects by Political Affiliation

|                     | Outcome Category | Two Year Community College | No Postsecondary Education |
|---------------------|------------------|-----------------------------|-----------------------------|
| Panel A: Subgroup Difference | Republican      | 0.129**                     | 0.097**                     | 0.037 | 0.057+ |
|                     |                  | (0.036)                     | (0.035)                     | (0.033) | (0.030) |
| Panel B: Cost and Returns | Costs and Returns Treatment | 0.025                      | 0.022                       | 0.069* | 0.063* |
|                     |                  | (0.037)                     | (0.036)                     | (0.034) | (0.030) |
|                     | Costs and Returns × Republican | -0.077                     | -0.062                      | -0.091* | -0.088* |
|                     |                  | (0.051)                     | (0.049)                     | (0.047) | (0.043) |
| Panel B: Returns Only | Cost Treatment   | 0.101*                      | 0.093*                      | 0.021  | 0.032  |
|                     |                  | (0.040)                     | (0.038)                     | (0.029) | (0.028) |
|                     | Costs × Republican | -0.121*                     | -0.095*                     | 0.007  | -0.005 |
|                     |                  | (0.050)                     | (0.048)                     | (0.048) | (0.042) |
| Panel D: Returns Only | Returns Treatment | -0.062+                     | -0.077*                     | 0.020  | 0.022  |
|                     |                  | (0.034)                     | (0.033)                     | (0.032) | (0.029) |
|                     | Returns × Republican | -0.074                     | -0.051                      | -0.013 | 0.008  |
|                     |                  | (0.059)                     | (0.056)                     | (0.045) | (0.044) |

Includes Controls: x

Notes: N = 4,204; 1,900 Republicans; 2,145 Democrats. Marginal effects shown. Omitted outcome category is preference for four-year university. Sampling weights included. Heteroskedastic robust standard errors used. **, *, and + indicate the coefficient is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively. Superscript letters a, b, and c indicate that the treatment effect for Republicans is statistically distinguishable from zero at the 0.01, 0.05, and 0.1 levels, respectively.