



**College Bound: The Effects of Values Frames on Attitudes
toward Higher Education Reform**

A FrameWorks Research Report

Prepared for the FrameWorks Institute

by

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Executive Summary

This study expands upon a previous experimental survey that examined the impact of values frames on support for progressive education reform. Here, six more detailed values frames were tested to assess their ability to move support for educational reforms, particularly with regard to higher education. Major findings in the bullets below indicate that:

- It is harder to mobilize support for higher education reform than K-12 reform.

In the last study, the bulk of treatments produced statistically significant effects in terms of movement on attitudinal scales measuring education reform. The present study, which focused on higher education reform more specifically, found fewer statistically significant effects, especially with White respondents (compared to an oversample of Non-White respondents).

- Treatments containing the value of Fairness – that is, Fairness Across Places and Fairness Between Groups – generally proved more effective than the other values tested in improving support for higher education reform.
- There are substantial differences between the way White and Non-White respondents react to education reform values treatments.

The optimal execution of the value of Fairness differs for White and Non-White audiences. As the research reported here explains, the best single value across all the observed attitudes and policies was Fairness Across Places, which suggests that the allocation of educational resources should be distributed fairly across communities, so that all communities have roughly equal abilities to educate the next generation. This value proved particularly salient to Non-White respondents.

- For Non-Whites, the value of Fairness Between Groups, executed with a specific appeal toward ensuring *disadvantaged groups* equal access to education resources, proved potent on several dependent measures.
- For Whites, however, a different execution of the value of Fairness Between Groups that did not refer to disadvantaged groups was more likely to move support for a variety of reform policies.

This milder execution suggests that the allocation of educational resources should be distributed fairly among *all social groups* in the country. The conceptual distinction, then, in the optimal value of Fairness between Non-White and White respondents, was in the focus of equity for disadvantaged groups against equity for all social groups, respectively.

- The value of Future Preparation did not perform as well as expected relative to its prior performance, unless combined with the value of Common Good.

This value – suggesting that the goal of higher education should be to prepare our nation’s children to meet our country’s future challenges – did very well at improving support for K-12 education reform (see the research report cited above, which summarizes experimental studies on values frames for K-12 education¹). This value, however, did not orient our respondents to think as productively about *higher education* reform efforts, with one critical exception.

- When Future Preparation was combined with the secondary value of Common Good – intimating that the most important goal in reform is to prepare young adults to *contribute productively to our society and to the communities in which they live* – we saw improved support on the Value of College measure for Non-Whites.
- A commonly advanced value in the public discourse, Global Competitiveness, on the higher education level actually depresses support for progressive policy reform.

The value of Global Competitiveness, which suggests that the goal of higher education reform should be to make our children competitive in the global economy, did not improve support for policies. In some cases, exposure to the value of Global Competitiveness decreased support as compared to the control, which received no values treatment. This suggests that communicators should avoid assertions regarding the importance of higher education in preparing children to meet the demands of a competitive global economy.

These and other experimental findings are reported in detail in the report that follows. We begin by discussing the changes from the previous study that led to the present effort, and then describe the process by which FrameWorks’ researchers identified, developed, and empirically tested the candidate values. We conclude with a discussion of how the empirically vetted values can be applied in communications regarding higher education reforms.

Introduction

Policy advocates continue to offer a myriad of proposals to revamp, reorient, and even resize the nature, scope, and content of what American schools offer to students. With the current economic crisis and shrinking state and federal education budgets, the need for progressive education reformers to explain to the public the direction reform efforts ought to pursue is increasingly important. FrameWorks, funded by the Nellie Mae Education Foundation and Lumina Foundation for Education, is engaged in identifying the way advocates can best present messages that will enhance reform appeals. This is the second FrameWorks report devoted to potential values underpinning education reform. The first report, supported by the Nellie Mae Education Foundation, examined values that

are primarily associated with the advocacy of pre-kindergarten through twelfth grade reform programs. This report, supported by the Lumina Foundation for Education, expands on that effort, further investigating promising avenues for communication and shifting the focus to higher education.

Our hypotheses regarding the relative performance of particular values to improve support for higher education reform policies were generated from the earlier qualitative stages of FrameWorks' larger investigation into effective framing of higher education, as well as a similar experimental survey that tested the effectiveness of values at improving support for progressive pre-K–12 policies. Throughout these strains of research related to education, FrameWorks found one of the most significant conceptual problems in the public's thinking to be the widespread consideration of education as "about" individual success and achievement. In short, the broader public purpose of education was not a readily accessible way of thinking about education and education reform. Our prior research on education found robust support for the ability of the value of Future Preparation to counteract this dominant model of individualism and improve support for progressive policy. As detailed below, this research further investigates the ability of this value to generate support for higher education reform.

In addition, across a variety of issues, FrameWorks has investigated the impact of the value of Fairness on support for progressive policies. We have found mixed results, depending on how the value is executed and the issue area to which it is attached.ⁱⁱ In general, we have found that a place-based equity frame is more productive than a groups-based equity frame. This is largely due to faulty notions of historical progress held by Whites with regard to racial equity. Prior research has confirmed that explicit priming of group disparities and historical discrimination triggers, rather than trumps, stereotyped notions about historical and institutionally based causes to racial inequity among Whites.ⁱⁱⁱ We find that priming conversations with an orientation to inter-group disparities serves to reinforce stereotyped and individualized patterns of reasoning regarding the causes of such disparities. Again, as detailed below, the present study examines the workings of the value of Fairness in detail and delves more deeply into ethnic differences across audiences by using an appropriate oversample of Non-White respondents.

If anything, higher education reform faces a more difficult hurdle in the public arena. While lower levels of the educational system are seen as broken, FrameWorks' qualitative research strongly suggests that America's colleges and universities are viewed more favorably. Most people do not even see colleges and universities as part of the communal education system. While most people agree that the public bears responsibility for educating our children, FrameWorks has found that citizens view choices concerning higher education as private decisions: bargains between colleges and universities on the one hand, and individuals on the other. This view stands in the way of attempts to change the higher education system through public policies. To address these problems, this paper reports on the results of an experimental survey designed to see which values will best motivate support for higher education reform.

Specifically, this research builds on the previous study in six related ways:

First, it builds higher education into the values treatments explicitly, attempting to shift the reform focus away from a narrow consideration of K-12 toward a more inclusive system that includes colleges and universities.

Second, it further explores the prior study's most successful value. In that study, treatments containing the value of Future Preparation saw the largest increase in respondents' support for progressive education reform. This study examines the value of Future Preparation more deeply by presenting treatments that combine that value with two other values that may enhance Future Preparation's potency. Ingenuity is the first value merged with Future Preparation, on the expectation that this mixture will promote conceptualizing higher education as a location for innovative reform. Common Good is the second value merged with Future Preparation, on the expectation that this mixture will overcome the tendency of citizens to view higher education as a private commodity.

Third, it further explores the prior study's second most successful value. In that study, Fairness Across Places proved to be highly potent at motivating support for progressive education reform. This study looks at the value of Fairness in more detail. Besides considering the effect of Fairness Across Places, this study assesses the dimension of Fairness Between Groups. Furthermore, in line with the finding that White and Non-White (African-American and Hispanic) [see note below] respondents reacted differently to the Fairness Across Places value treatment, two versions of Fairness Between Groups are presented – a “mild” version designed to change White attitudes but not prompt a backlash against community-based solutions, and a “stronger” version highlighting disadvantaged groups expected to appeal more to Non-White audiences.

Fourth, in addition to examining the differential effects of versions of Fairness Between Groups, this study also probes the diverse reactions of Whites and Non-Whites to Fairness Across Places in the last study by introducing an oversample of Non-White respondents. The prior study's national sample did not have a sufficient number of minority respondents to provide a statistically powerful test of the hypothesis that Whites and Non-Whites react differently. This study remedies that shortcoming by including sufficient numbers of Non-White respondents to successfully gauge their reactions to the value treatments. In fact, all of the analyses presented here are performed in parallel for White and Non-White respondents in order to pinpoint dissimilarities in the ways they respond to the values treatments.

Fifth, this study includes an embedded experiment on messenger credibility. This design tests the widely held belief that business leaders are the best spokespeople for education reform. Thus, we compare a condition in which the value message of Future Preparation was attributed to a business leader, Pat Jones, the President and Chief Executive Officer of the private company Education Solutions, against a condition featuring a nonprofit spokesperson, Pat Jones, the head of a nonprofit research group that studies education, as well as against a condition – labeled Basic – with no specific spokesperson attributed to the text.

Sixth and finally, this study employs a broad range of dependent, outcome measures. Given the expectation that attitudes toward higher education reform will be particularly hard to move, we included three kinds of question batteries in the instrument. The first type concerns higher education exclusively, for example a scale measuring respondents' beliefs on the Value of College. The second type mixes higher and lower education to provide indicators of attitudes toward education reform; for example a scale measuring attitudes toward the Scope of Government charted the willingness of respondents to use government intervention to promote reform at both levels. The third type focuses on the same pre-K–12 policies used in the last study, for example Early Childhood Learning. These three levels allow us to see whether or not the new treatments spilled over into attitudes concerning different levels of education, and to provide a comparison against the other batteries.

Methods

The findings reported here are drawn from an experimental online survey administered by YouGov Polimetrix between March 11 and March 16, 2010. The study included a nationally representative sample of 2,860 registered voters (weighted on the basis of age, gender, education level, and party identification to known marginals for the population of registered voters in the United States from the 2006 American Community Survey), and was drawn from an online panel of over a million respondents. Because previous FrameWorks research suggests that White and Non-White respondents may react differently to the values contained within advocacy communications,^{iv}, an oversample of African-American and Hispanic [note: above you use Black and Latino; be consistent] participants was added to provide a basis for the interracial comparisons presented below. These analyses combine African-American and Hispanic respondents to increase the number of respondents per condition and provide sufficient statistical power to make reliable inferences. The oversample allows us to assess the relative difference in reactions of White and Non-White respondents to the values treatments. As will be seen, this analytic strategy was justified by the differences in reactions across groups.

Finally, 541 respondents were randomly assigned to the control group, while the remainder were randomly assigned to one of the six experimental conditions (values treatments) described below.

Values Treatments

This study assessed the ability of six values frames to improve support for policies related to higher education reform in the United States. The treatments were text-based stimuli, presented to subjects in the form of a newspaper article, each of which was tested using the Flesch-Kincaid Index to assure that the reading level was roughly similar across treatments. In addition, the specific wording in the setup of the treatments was kept as uniform as possible. Each treatment introduced to subjects the idea that a particular value might guide higher education reform policies. The exact wordings of each treatment appear in Appendix A, but a brief description of each is below:

- Future Preparation – This treatment concentrates on the linkage between higher education and its ability to prepare students to meet the challenges our society will face in the future.^v
- Future Preparation + Ingenuity – This treatment combines the Future Preparation value with a highlight directed toward explaining how American innovation can be an important facet of that preparation.
- Future Preparation + Common Good – This treatment combines the Future Preparation value with a highlight directed toward explaining how promoting the common welfare is an important reason for that preparation.
- Fairness Across Places – This treatment focuses on the goal of redressing imbalances in educational resources among different locations.
- Fairness Between Groups – This treatment concerns redressing imbalances in educational resources across different groups in society.^{vi}
- Global Competitiveness – This treatment addresses the relative position of the United States in the global economy.

Subjects in the control group (which received no treatment) and in each of the six values conditions were then asked to answer the questions described in the next section.

Dependent Measures

Based on policy proposals being debated and promoted among education policy experts, researchers devised a series of policy questions to serve as dependent variables in this study. Six conceptually distinct scales were developed – for which respondents’ relative support or opposition was measured – in order to examine the extent to which exposure to any of the values treatments made subjects more or less likely to support progressive policies. Each of these scales comprised up to thirteen individual questions; the individual questions were subjected to a principal components analysis (PCA) to produce a single dependent measure for that scale. PCA is a statistical technique that looks for commonality among different measures. When multiple survey questions are combined into a single measure using PCA, a superior measure is produced that tracks the overlap between questions, instead of the potentially idiosyncratic effects of each one. The exact wording of each question appears in Appendix B.

The six fundamental scales are:

Equity, which measured respondents’ support for the educational system’s ability to provide uniform treatment and access to all students.

Productivity, which measured respondents’ preference for supporting or taking measures

to increase the number of students enrolled in higher education.

Efficiency, which measured respondents' support for creating or enhancing the ability of colleges and universities to perform an educational mission, given a set of resources.

Incentive, which measured support for creating or enhancing ways to motivate schools toward higher performance.

Personal/Family Responsibility, which measured support for creating or enhancing means to foster the accountability of students in dealing with the educational system.

Early Learning, which measured attitudes related to preparation of children for school.

Three additional scales tapped broader concepts:

Value of College, which charted respondents' support for college education in general.

Evaluating Performance, which charted respondents' attitudes toward more progressive means of charting student accomplishment.

Scope of Governance, which tapped respondents' views toward government intervention in the educational system.

The inquiry also includes a final scale that combines all the higher education questions across all the scales used. This *Composite Higher Education* measure taps respondents' attitudes toward higher education reform and is used as a cornerstone to assess all the hypotheses. This scale's PCA accounts for 43 percent in seven questions. The seven questions chosen are denoted by asterisks (*) in the wording appendix.

For analytic purposes, all the scales are organized according to their relevance to higher education as opposed to education reform in general. Three scales are specific to higher education reform: Composite Higher Education, Value of College, and Equity. Four scales mix higher and lower education reform efforts: Productivity, Incentive, Scope of Governance, and Evaluating Performance. Three scales are specific to lower education: Efficiency, Responsibility, and Early Learning.

Results

Few results were statistically significant with respect to the control condition. This preliminary finding is in line with the expectation that attitudes toward higher education reform are tougher to change than attitudes toward K-12 reform. However, some values treatments performed markedly better than other values treatments. To provide a statistical test, we compare the best value to the worst value in each dependent variable category. This test gives us information on the benefit of each choice of value to use in advocacy communication. When we see a statistically significant difference – one that is not attributable to chance variations in the scores – that strongly suggests that the choice

of value makes a substantive difference in the effect in terms of policy preferences of choosing one value message over another. When the results are not statistically significant, it means that selecting a particular value to emphasize will not have salient consequences.

We first evaluate the relative performance of each values treatment on the different policy scales organized by their specificity to higher education reform. In line with the oversampling strategy discussed above, the results are broken down according to race of respondent. Table 1 summarizes the best and worst values performers along each dependent measure for White respondents; Table 2 presents the same information for Non-White respondents. The data on which these two tables are based appear in Appendix C. Note: in Appendix C, the individual scale results are standardized on a hundred-point scale, where one hundred is the most progressive attitude and zero is the least progressive attitude.

Table 1. Best and Worst Values Performers: White Respondents

<u>Dependent Measure</u>	<u>Best</u>	<u>Worst</u>
<u>Higher Ed. Scales:</u>		
Composite Higher Ed.	Fairness Between Groups (mild)	Fut. Prep. + Common Good
Equity	Future Preparation	Fairness Between Groups (strong)
Value of College	Fairness Between Groups (mild)	Future Preparation
<u>Mixed Scales:</u>		
Productivity	Future Preparation	Global Competitiveness
Evaluating Performance	Fairness Across Places	Fairness Between Groups (strong)
Scope of Government	Fairness Between Groups (mild)	Global Competitiveness
Incentive	Fut. Prep. + Common Good	Global Competitiveness
<u>Lower Ed. Scales:</u>		
Responsibility	Fairness Between Groups (mild)	Global Competitiveness
Early Learning	Fairness Across Places	Fut. Prep. + Ingenuity
Efficiency	Fairness Between Groups (mild)	Global Competitiveness

Statistically significant results are presented in bold.

Table 2. Best and Worst Values Performers: Non-White Respondents

<u>Dependent Measure</u>	<u>Best</u>	<u>Worst</u>
<u>Higher Ed. Scales:</u>		
Composite Higher Ed.	Fut. Prep. + Common Good	Future Preparation
Equity	Fairness Across Places	Future Preparation
Value of College	Fut. Prep. + Common Good	Future Preparation
<u>Mixed Scales:</u>		
Productivity	Fairness Across Places	Future Preparation
Evaluating Performance	Fairness Across Places	Fut. Prep. + Ingenuity
Scope of Government	Fairness Between Groups (strong)	Future Preparation
Incentive	Fairness Between Groups (strong)	Future Preparation
<u>Lower Ed. Scales:</u>		
Responsibility	Fairness Between Groups (strong)	Global Competitiveness
Early Learning	Fairness Across Places	Future Preparation
Efficiency	Fairness Across Places	Future Preparation

Statistically significant results are presented in bold.

Again, to calculate significance, which is the likelihood that a result is due to chance rather than the change in treatment value, we examined the size of the gap between the best and worst performing value for each of the dependent measures in terms of moving values toward the progressive end of the spectrum. The size of this gap directly corresponds to its statistical significance. Thus, in these tables, statistically significant results indicate the more impactful decisions about which value to communicate in advocacy.

Before turning to specific hypotheses, a few general comments are in order. One of the best performers across racial groups at moving support toward more progressive attitudes was Fairness Across Places, as was hypothesized. This was most successful among Non-Whites across five of the ten dependent measures, and was the most successful for Whites on two measures. For Whites, the mild version of the Fairness Between Groups value improved support on four of the nine dependent measures, and for Non-Whites, the strong version of Fairness Between Groups moved support on three of the nine dependent measures. These results are consistent with the experimental hypotheses, as discussed below.

Overall, then, some version of Fairness represents the best choice for a value to underpin advocacy communications. In fact, of the 20 tests (10 dependent measures for White and Non-White respondents) assessing the ability of a value to move support in a progressive direction, some version of Fairness scored the highest in all but six. There is, however, evidence that the way in which the value of Fairness is deployed has a powerful impact on its likelihood of success. For example, although the mild version of Fairness Between Groups generally does well with White audiences, the stronger version is the worst performer among Whites on two dependent measures. We discuss the important differences in the specific executions of the value of Fairness in the following sections.

Hypothesis One: Global Competitiveness

Allusions to Global Competitiveness form the basis for many discussions of education reform today. This value appears, for instance, whenever school spending or achievement in the United States is compared to that of different countries. We expected that this value would not move attitudes toward education reform in this study because respondents are either inured to messages about foreigners, simply dismissing evidence that the U.S. is not a “great” country, or else tend to devalue messages that describe failures in our country’s performance. Sure enough, the value of Global Competitiveness did not fare well in our tests, especially among White participants. In five of ten categories for Whites, Global Competitiveness was the worst performer; three of these were statistically significant. Education reform advocates are advised to curtail the use of Global Competitiveness as a motivating value in their messages.

Hypothesis Two: Future Preparation

The value of Future Preparation, by itself, did not perform as well in the higher education setting as it did in the lower education setting of the last experiment. There were, however, some strong showings: Future Preparation was the best performing value on the Productivity measure for Whites (a mixed scale that mirrors the dependent variable in the last study) as well as on [?] the Equity scale, although this result was not statistically significant. For Non-White respondents, Future Preparation performed particularly poorly, being the worst performing value in eight of ten cases; six of these were statistically significant. It appears then that Non-Whites are especially susceptible to seeing education as a private good.

In contrast, combinations of Future Preparation, chiefly when flavored with Common Good, proved to be potent at driving attitude change in certain circumstances. On the two critical scales – Composite Higher Education and Value of College – Future Preparation plus Common Good caused substantial and statistically significant attitude change among Non-White respondents. This indicates that changing the trajectory of Future Preparation by leavening it with a dose appealing to a more collective value will pay big dividends with Non-White audiences. This dose of Common Good, which only changes a few words in the experimental treatment (see Appendix A), was sufficient to move Future Preparation from the worst to the best performing value. Future Preparation

also did well on the Incentive scale for Whites. Advocates, particularly those addressing Non-White audiences, are advised to reshape appeals based on the value of Future Preparation to include allusions to the public interest that is advanced by higher education reform.

Hypothesis Three: Fairness

Values linked to Fairness did particularly well in this study; however, getting the exact version of Fairness right, the one that will produce the most effective messages, stands as a critical research finding. In line with the previous experiment, Fairness Across Places did reasonably well at moving attitudes toward reform in a more progressive direction, again particularly with Non-White audiences. For Non-Whites, Fairness Across Places was the best performing value in five of ten categories – three of which were statistically significant. For Whites, Fairness Across Places performed well in two categories, of which Evaluating Performance was statistically significant. As discussed below, Fairness Across Places represents a good choice when addressing audiences of mixed ethnicity and may prove to be the most effective value when little audience information is available.

Results for Fairness Between Groups depend heavily on matching the right version to the right audience. Time and again, on eight of the twenty possible slots, Fairness Between Groups proved to be the most effective at moving attitudes. However, as expected, the mild version of this scale was effective among Whites, while the strong version of this scale was effective among Non-Whites. In fact, Whites were so ill-disposed to the strong version, which featured a mention of “disadvantaged” groups, that the strong version actually performed the worst in two categories, Equity and Evaluating Performance. It seems clear then, as discussed below, that the tenor of values messages that include Fairness Between Groups must be carefully calibrated depending on the audience in question.

Hypothesis Four: Messenger Credibility

Folded into the values experiment was a test of messenger credibility. Specifically, we tested the commonly held belief that business leaders are effective spokesmen for education reform efforts. Thus, we compared a condition in which the value message of Future Preparation was attributed to a business leader, Pat Jones, the President and Chief Executive Officer of the private company Education Solutions, against a condition featuring a nonprofit spokesperson, Pat Jones, the head of a nonprofit research group that studies education, as well as against a condition – labeled Basic – with no specific spokesperson attributed to the text.

These three conditions were used to assess the effects of different messengers on respondents’ support for progressive higher education reform – as assessed by the same dependent measures used above. Thus, the messenger conditions were: no messenger – this was the Basic version of the Future Preparation condition; public messenger – this attributed the statements in the simulated article to a leader from a nonprofit group; and

private messenger – this attributed the statements in the simulated article to a representative of a private commercial organization, in other words, a business person. Once again, the analysis was designed to capture the effects across different racial groups.

Table 3 presents the average responses to all the dependent variables for White participants. The scale was computed from zero to one hundred, where higher numbers equate to more progressive attitudes. While the Basic – no messenger identified version – generally does best in terms of generating progressive support, the Public Messenger nearly always beats the Private Messenger on this same rubric. In fact, there are only two categories, both with insignificant differences, where the Private Messenger is more successful at moving attitudes: Efficiency and Incentive. Overall, advocates addressing White audiences would do best by having their message delivered by a nonprofit education leader, for example, than someone involved with private business. Secondly, advocates should question whether a specific messenger is necessary, as the Basic condition – with no messenger identified – generally outperforms the other two.

Table 3. Messenger Credibility among White Respondents

<u>Value Treatment:</u>	<u>Basic</u>	<u>Public Messenger</u>	<u>Private Messenger</u>
Equity	51.07	47.65	45.17
Productivity	37.69	34.56	31.31
Efficiency	31.08	30.55	31.05
Incentive	37.86	33.40	33.49
Responsibility	31.87	30.04	29.38
Learning	42.05	40.15	37.67
Value of College	35.09	37.92	33.60
Evaluating Performance	57.22	56.90	54.30
Scope of Government	56.41	55.18	49.94
Composite Higher Ed.	52.70	50.66	48.36

Table 4 shows the same results for Non-White respondents. Again, the Public Messenger generates more support for progressive policies than the Private Messenger, but to a much larger extent for Non-White respondents. In fact, for Non-White respondents, the Public Messenger also outperformed the no-messenger Basic condition. We suspect that this is due to increased suspicion among Non-White respondents about the motivation of the messenger, but this is merely speculation.

Table 4. Messenger Credibility among Non-White Respondents

<u>Value Treatment:</u>	<u>Basic</u>	<u>Public Messenger</u>	<u>Private Messenger</u>
Equity	28.33	34.46	29.19
Productivity	25.59	31.52	25.17

Efficiency	22.46	28.03	24.79
Incentive	26.59	31.83	28.32
Responsibility	26.56	26.51	23.28
Learning	25.35	32.34	26.80
Value of College	32.47	34.48	30.02
Evaluating Performance	55.40	59.82	50.61
Scope of Government	39.13	48.02	41.69
Composite Higher Ed.	36.82	41.17	37.66

Overall, then, progressive advocates for higher education reform would receive more support among White and Non-White respondents by employing a public messenger than a private messenger.

Discussion

The survey experiment demonstrates the relative difficulty in selling higher education reform to the American public, compared to general education reform or lower education reform, as outlined in FrameWorks' previous experiments. In those experiments, strong significance was achieved by the value of Future Preparation, and on issues related to equity, significance was achieved by Fairness Between Places. This was true for a wide array of policies and programs that were lifted by exposure to these values.

On higher education, thinking proved much harder to budge. Especially for Whites, the key higher education scales of Equity, Value of College, and the Composite Higher Education measure proved resistant to values priming. This is consistent with the qualitative research where we observed that people largely do not believe that the higher education system is broken – a clear contrast to their thinking about K-12 education. Given this lack of a perceived problem, we suggest that these new survey findings relate to this inability to conceptualize the problem for which these policies are proposed as a solution. On the other hand, Whites expressed higher average levels of support for higher education reform than Non-Whites.

Moreover, the qualitative research on which this experiment is built clearly demonstrates that consumerist thinking is even more pervasive and entrenched in higher education thinking than in attitudes to K-12 education. That is, if higher education is a commodity that is purchased by students and parents for individual achievement, then it can be expected to lack a public definition, one of the prerequisites to collective or governmental solutions. Reasoning in this way, some people can afford a higher education and some can't, and this may be regrettable, but it does not rise to a societal problem that requires government intervention or policy solutions.

In this context, it is important to note what this research was able to achieve through the values stimuli and what remained beyond their reach. Perhaps most important was the statistical significance achieved in supporting a strong role for government with respect to higher education. Two related values strongly enhanced support for statements that

government should do more to ensure equity, and improve both the quality and affordability of education. For Whites, Fairness Between Groups (mild) and for Non-Whites, Fairness Between Groups (strong) lifted support for a role for government in higher education. This is a welcome finding for higher education advocates.

Fairness Across Places, in line with the previous study, showed a strong and significant impact on Evaluating Performance. When exposed to this value, people were able to see why it would be important to provide federal funding for states to track student academic performance and to tie state funding for public colleges and universities to the number of students they successfully graduate.

It is interesting to note two values effects unique to the Non-White sample that further underscore the effect of values on policy thinking. This experiment included a set of policies that addressed the early foundations of learning. Here, a significant effect was achieved for the Non-White sample by Fairness Across Places. That is, when exposed to the idea that a fairer distribution of education resources is necessary to support student achievement, Non-Whites applied this to early care and education and increased their priority for these programs. The value did not achieve significance for Whites, although it was the most powerful of those tested.

Similarly, Non-Whites were better able to see the value of college when exposed to Future Preparation + Common Good. They became more supportive of the fact that “in this day and age, almost everyone needs at least a bachelor’s degree to succeed,” and more supportive of measures to increase universal access. Support also increased to a statistically significant degree on the crucial Composite Higher Education measure. At the same time, we recognize that Future Preparation, without the added assertion that this was in the nation’s best interest, did not enhance support on these dimensions. Put simply, Non-Whites need to be reminded that enhancing access to college accrues benefits for all, not just for some, and that this is a necessary part of preparing our country for the future. No other value achieved this shift in support for Non-Whites, or for Whites, for that matter.

It is also interesting to note that the results challenge a staple of education reform advocacy in the United States. According to these findings, the knee-jerk recourse to business people as attractive advocates for reform is unwarranted. We suspect that in many cases, a public spokesperson would do just as well, if not better, than one identified with a private interest. In addition, certain circumstances might require de-emphasizing the spokesperson altogether.

Finally, policies related to Productivity and Innovation/Efficiency were significantly affected by values priming. Future Preparation enhanced Whites’ support for accelerated degree programs and credit for out-of-school learning opportunities. Fairness Between Groups in its mild version significantly increased Whites’ support for innovation and efficiency in higher education as well as in other grades. For Non-Whites, this goal was better achieved by Fairness Across Places.

These findings lead us to conclude that there are similarities in effects between values we identified for K-12 and those for higher education, but they are reversed. That is, Fairness – appropriately calibrated to audience – serves as the prime value of impact, and Future Preparation plays an auxiliary role.

All in all, however, these effects are not as strong as those we observed for the K-12 policies. Getting the public to see the need to reform higher education remains an uphill struggle. This suggests, moreover, that other frame elements – such as Simplifying Models – will have to be deployed to get people to integrate higher education into the overall system of American education, and to see reform as appropriate to higher education, not merely lower education. As it stands, making these shifts remains a challenge for higher education reform advocates. Some optimism can be drawn from the ability of the values tested here to achieve some significant shifts in the right direction.

About FrameWorks Institute: The FrameWorks Institute is an independent nonprofit organization founded in 1999 to advance science-based communications research and practice. The Institute conducts original, multi-method research to identify the communications strategies that will advance public understanding of social problems and improve public support for remedial policies. The Institute’s work also includes teaching the nonprofit sector how to apply these science-based communications strategies in their work for social change. The Institute publishes its research and recommendations, as well as toolkits and other products for the nonprofit sector, at www.frameworksinstitute.org.

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Appendix A

Exact Wordings of All Experimental Treatments

1. Future Preparation

Preparing Nation to Meet Future Challenges Should Guide U.S. Education Policy

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to prepare our nation's children to meet future challenges. People who believe in this goal know that we should be doing much more to educate and prepare our children for the challenges our society will face in the future. According to this view, we could improve our nation's prospects for the future by updating the entire educational system to reflect the skills our children will need in the world of tomorrow. So, we should use our resources to provide a better educational foundation that retains what's worked well but also specifically prepares our children for the challenges of the next century. If we fail to adequately update the educational system, our nation will not be prepared for the future. Our country cannot afford to be caught unprepared by leaving our children to figure out how to address future challenges by themselves. With the right goal in mind to guide our reforms, our country will be able to draw upon the skills and capabilities we will need to succeed in the future. Successfully reformed colleges and universities would produce fully prepared children capable of meeting our country's future challenges.

Pull out: Future Preparation is key to education policy reform.

2. Future Preparation (Public Messenger)

Education Expert Pat Jones Says Preparing Nation to Meet Future Challenges Should Guide U.S. Education Policy

Pat Jones, the head of a nonprofit research group that studies education, made statements on education reform today. Jones said that when reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to prepare our nation's children to meet future challenges. People who believe in this goal know that we should be doing much more to educate and prepare our children for the challenges our society will face in the future. According to this view, we could improve our nation's prospects for the future by updating the entire educational system to reflect the skills our children will need in the world of tomorrow. So, we should use our resources to provide a better educational foundation that retains what's worked well but also specifically prepares our children for the challenges of the next century. If we fail to adequately update the educational system, our nation will not be prepared for the future. Our country cannot afford to be caught unprepared by leaving our children to figure out how to address future challenges by themselves. With the right goal in mind to guide our reforms, our country will be able to draw upon the skills and capabilities we will need to succeed in the future. The education expert concluded that

successfully reformed colleges and universities would produce fully prepared children capable of meeting our country's future challenges

Pull out: Education expert Jones says Future Preparation is key to education policy reform.

3. Future Preparation (Private Messenger)

Business Leader Pat Jones Says Preparing Nation to Meet Future Challenges Should Guide U.S. Education Policy

Pat Jones, the President and Chief Executive Officer of the private company Education Solutions, made statements on education reform today. Jones said that when reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to prepare our nation's children to meet future challenges. People who believe in this goal know that we should be doing much more to educate and prepare our children for the challenges our society will face in the future. According to this view, we could improve our nation's prospects for the future by updating the entire educational system to reflect the skills our children will need in the world of tomorrow. So, we should use our resources to provide a better educational foundation that retains what's worked well but also specifically prepares our children for the challenges of the next century. If we fail to adequately update the educational system, our nation will not be prepared for the future. Our country cannot afford to be caught unprepared by leaving our children to figure out how to address future challenges by themselves. With the right goal in mind to guide our reforms, our country will be able to draw upon the skills and capabilities we will need to succeed in the future. The business leader concluded that successfully reformed colleges and universities would produce fully prepared children capable of meeting our country's future challenges.

Pull out: Business leader Jones says Future Preparation is key to education policy reform.

4. Future Preparation + Ingenuity

Innovation Can Help U.S. Education Policy Prepare for Future Challenges

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to prepare our nation's children to meet future challenges. People who believe in this goal know that we should be doing much more to bring new ideas and innovation into educating and preparing our children for the challenges our society will face in the future. According to this view, we could improve our nation's prospects for the future by innovating and updating the entire educational system to reflect the skills our children will need in the world of tomorrow. So, we should use our resources to provide a better educational foundation that retains what's worked well. But we must also prepare our children for the challenges of the next century. If we fail to adequately update the educational system, our

nation will be stuck with the same old educational programs and will not be prepared for the future. Our country cannot afford to leave our children to figure out how to address future challenges by themselves or to rely on outdated methods. With the right goal in mind to guide our reforms, we could produce new solutions that give our country the skills and capabilities it will need to succeed in the future. Successfully reformed colleges and universities would produce new solutions to make children capable of meeting our country's future challenges.

Pull out: Innovation to support Future Preparation is key to education policy reform.

5. Future Preparation + Common Good

Shared Benefits of Educated Population Should Guide U.S. Education Policy

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to prepare our nation's children to contribute productively to our society and to the communities in which they live. People who believe in this goal know that we should be doing much more to promote the common good by educating and preparing our children for the challenges our society will face in the future. According to this view, we could improve our nation's prospects for the future by updating the entire educational system to reflect the skills our children will need in the future and making sure that it works for the benefit of all. So, we should use our resources for everyone's benefit by retaining what's worked well. But we must also provide a better educational foundation that prepares our children for the challenges of the next century. If we fail to adequately update the educational system, our nation will not be prepared for the future and all of us will suffer the consequences. Extending education's benefits to all ensures that our children will not be left alone to figure out how to address future challenges. With the right goal in mind to guide our reforms, our country will be able to draw upon everyone's skills and capabilities to confront the challenges we all will face in the future. Successfully reformed colleges and universities would produce a nation where all children contribute fully to our society and are capable of meeting our country's future challenges.

Pull out: Future Preparation benefits all and is key to education policy reform.

6. Fairness Across Places

Fairer Distribution of Resources Across Communities Should Guide U.S. Education Policy

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to allocate resources fairly across communities. People who believe in this goal know that we should be doing much more to make sure that all communities have the ability to educate and prepare our nation's children. According to this view, we could improve our nation's prospects by making sure the allocation of resources is fair between different places. So,

we should use our resources to make sure that all communities have access to quality education. If we fail to adequately update the entire educational system, some areas will have good educational systems and others will not. Our country cannot afford to limit its talent pool by having great differences in educational quality from place to place. With the right goal in mind to guide our reforms, every area would receive a fair share of educational resources. Successfully reformed colleges and universities would do a better job if they had the ability to draw from well- prepared students, no matter where they lived.

Pull out: Fairer distribution of education resources to communities is key to education policy reform.

7. Fairness Between Groups – Mild

Closing Achievement Gap Between Groups Should Guide U.S. Education Policy

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to allocate resources fairly among all groups in the society. People who believe in this goal know that we should be doing much more to make sure that all groups have the ability to educate and prepare their children. According to this view, we could improve our nation's prospects by making sure the allocation of resources is fair among different groups in the society. So, we should use our resources to make sure that all people have access to quality education. If we fail to adequately update the entire educational system, some groups in our society will have good educational systems and others will not. Our country cannot afford to limit its talent pool by having great differences in educational quality from group to group. With the right goal in mind to guide our reforms, every group would receive a fair share of educational resources. Successfully reformed colleges and universities would do a better job if they had the ability to draw from well- prepared students, no matter what group they are from.

Pull out: Fairer distribution of education resources between groups is key to education policy reform.

8. Fairness Between Groups – Strong

Closing Achievement Gap for Disadvantaged Students Should Guide U.S. Education Policy

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to allocate resources fairly among all groups in the society. People who believe in this goal know that we should be doing much more to make sure that disadvantaged groups have the ability to educate and prepare their children. According to this view, we could improve our nation's prospects by making sure the allocation of resources is fair among different groups in the society. So, we should use our resources to make sure that disadvantaged

people have access to quality education. If we fail to adequately update the entire educational system, some groups in our society will have good educational systems and others will not. Our country cannot afford to limit its talent pool by having great differences in the educational quality available to disadvantaged groups. With the right goal in mind to guide our reforms, underserved groups would receive a fair share of educational resources. Successfully reformed colleges and universities would do a better job if they had the ability to draw from well- prepared students, no matter what group they are from.

Pull out: Fairer distribution of education resources among disadvantaged groups is key to education policy reform.

9. Global Competitiveness

Addressing Global Competitiveness Should Guide U.S. Education Policy

When reforming education, we need to look to the value that should be guiding the policy. The most important goal in reforming colleges and universities is to make our children competitive in the global economy. People who believe in this goal know that we should be doing much more to educate our children for the competitive global economy. According to this view, we could improve our nation's prospects by updating the entire educational system to reflect the skills our children will need to compete with those from other nations. So, we should use our resources to provide a better educational foundation that specifically prepares our children for the competition of the next century. If we fail to adequately update the educational system, our children will not be able to compete globally. Our country cannot afford to leave our children to figure out how to address this competition by themselves. With the right goal in mind to guide our reforms, our children would have the skills and capabilities they need to succeed when confronting anyone in this competition. Successfully reformed colleges and universities would produce children capable of winning the global competition.

Pull out: Global Competitiveness is key to education policy reform.

Appendix B

Dependent Measures

All dependent measures were preceded with the following prompt: *Now, we'd like to ask you some questions about policy proposals that are being considered in our country today. We would like to have your honest opinions about these policy ideas. Please indicate if you would favor or oppose the following policies to achieve public priorities in our nation's education system.* Each scale followed this prompt in a separate section, headed by the title of that scale and the questions in the order they appear here.

Equity was measured by support for the system's ability to provide uniform treatment and access to all students. The questions ran as follows:

1. Develop more intensive counseling and school-based mentoring programs for teens at risk of dropping out of high school.
2. Expand federal and state internship programs to help underrepresented, minority and low-income students get the mentoring they need to do well in school.
3. Increase federal or state funding to colleges and universities that are educating groups not traditionally well-served by higher education to offset the additional resources needed for these students. (*)
4. Expand funding for programs at community colleges and universities that demonstrate improved minority student graduation rates. (*)
5. Phase out federal funding for Historically Black Colleges and Universities or other minority-serving institutions. (reverse code) (*)

The PCA captured 62 percent of the variance in the five questions. This means that answers to the questions overlapped to such a degree that a single question could account for 62 percent of the changes in answers across all five questions. **All the factors were multiplied to construct roughly to a scale of one hundred for ease of interpretation. Higher numbers always mean more support for that policy goal.**

Productivity was measured by support for institutions to graduate sufficient students. These questions were:

1. Make quality accelerated degree programs more available to students so they can earn a college degree faster.
2. Offer more flexible class schedules and add more convenient off-campus learning sites to encourage class attendance.
3. Provide child care and other supports for students with children.

4. Develop additional “out-of-school” learning opportunities that count for academic credit.

This PCA captured 56 percent of the variance in the four questions.

Efficiency was measured by support for creating or enhancing the ability of colleges and universities to perform an educational mission with a given set of resources while incorporating new ideas. These questions were:

1. Develop new student assessment measures that do not rely so heavily on standardized tests.
2. Provide teachers with continuing education programs that allow them to update their teaching methods to include 21st- century skill-building in areas such as problem solving, critical thinking, and global awareness.
3. Develop a personalized learning plan for each student that makes individualized instruction possible and helps teachers recognize variations in students’ aptitudes, interests, experiences, and needs.

This PCA captured 53 percent of the variance in the three questions.

The Incentive questions were measured by support for creating or enhancing ways to motivate schools toward higher performance. These questions were:

1. Provide increased federal funding for states to expand their capacity to track student academic performance across students’ entire educational experience – from early learning to postsecondary education to the first job.
2. Expand state funding to schools that are successful in creating and sustaining community partnerships (e.g., with business owners, community-based organizations) that broaden students’ learning activities.
3. Expand grant programs to businesses and nonprofit organizations that provide apprenticeships, job training, or practical professional experiences for high school students.

This PCA captured 62 percent of the variance in the three questions.

The Personal/Family Responsibility questions measured the support for creating or enhancing means to foster the accountability of students in dealing with the educational system. These questions were:

1. Create strong parent networks in local school districts so that information about college preparation can be effectively passed to them to benefit their children.
2. Make parents more aware of college-savings programs for their children. (*)
3. Ask all parents of elementary and secondary school children to sign a pledge to read to their children at least three times per week.
4. Parents who do not participate in at least one activity at their children's school during a school year (e.g., parent-teacher conferences, school plays, spelling bees, etc.) should risk losing their annual child care tax credit. (reverse code)

This PCA captured 49 percent of the variance in these four questions.

The Early Learning questions tapped attitudes toward items that pertained to preparation for higher education. These questions were:

1. Improve the quality of early care and education centers by investing more resources in small class sizes, low teacher-child ratios, and highly skilled teachers.
2. Make high-quality early care and education programs more affordable for low-income families by providing public subsidies.
3. Forgive federal loans for students who become trained and work for at least five years in child care and education programs in low-income areas.
4. Increase access to Early Head Start and other comprehensive, high-quality settings for infants and toddlers.

This PCA captured 66 percent of the variance in these four questions.

Three more scales tapped other attitudes of interest that related to higher education more broadly. First, two questions measured whether respondents agree that college education is desirable and a worthwhile goal:

1. Increasing the number of college graduates in the United States depends mostly on increasing student support and college preparation.
2. College education should be promoted broadly to any student who desires to pursue higher education. (*)

This PCA captured 65 percent of the joint variance.

Next, a set of questions measured respondents' attitudes about ways that student performance might be improved or their performance evaluated. The wording of these questions was:

1. Creating learning opportunities for students outside of the classroom and school is a good way to improve students' academic performance.
2. If students have more input into their learning, they are more likely to succeed in school.
3. Starting in high school, students should be able to set their own pace in terms of the amount of scholastic materials they cover in a school year.
4. Standardized tests are not the best way to measure student progress over time and other measures are needed.

The PCA covering these four items captured 53 percent of their variance.

A final battery assessed respondents' attitudes about the scope of government's activity in education; this scale had a separate introduction: *Thinking about improving the educational experiences of children and young adults, indicate on the following grid which of the viewpoints expressed come closer to your own – even if neither is exactly right.* This scale contained four questions that ran as follows:

1. Government should do more to improve the educational experiences of the nation's students.
2. In order to improve higher education in America, we should focus on reforming the existing education system so it works better for everyone. (*)
3. The government should do more to offset the costs of getting a college education by offering more financial aid, including work study programs. (*)
4. Federal funding should be expanded to school districts with few local resources.

This PCA captured 72 percent of the variance in these four questions.

Appendix C

Exact Results by Dependent Measure

Equity

In the Equity battery, higher scores indicate a stronger preference for measures to address the imbalance in resources across different schools. Here, across all conditions including the control group (which received no framing treatments), Whites showed a greater preference toward equity than Non-Whites; thus the table shows higher scores for White respondents than Non-White respondents. The Future Preparation value was most successful at lifting support for equity attitudes and policies among Whites, while Fairness Across Places was most successful at lifting equity measures for Non-White respondents. Interestingly, we see a strong disparity in the Future Preparation value across members of different ethnic groups; it scored lowest among Non-Whites, while the strong version of Fairness Between Groups scored lowest among Non-Whites. None of these results, however, were statistically significant.

Table A. Mean Ratings for Equity, Whites and Non-Whites

<u>Value Treatment</u>	Equity	
	<u>White</u>	<u>Non-White</u>
Future Preparation	51.07	28.33
FP + Ingenuity	50.96	32.96
FP + Common Good	49.20	32.76
Fairness Across Places	51.01	34.00
Fairness Between Groups (Mild)	49.61	33.63
Fairness Between Groups (Strong)	48.80	31.27
Global Competitiveness	50.01	31.94
Control	50.28	32.54

Productivity

In the Productivity battery, higher scores indicate a stronger preference for supporting or taking measures to increase the number of students enrolled in higher education. Here, Whites again accorded higher scores than Non-Whites, but to a lesser degree than in the Equity battery. Again, the Future Preparation value was the most successful at lifting support among Whites and the least successful among Non-Whites, while Fairness Across Places was the most successful among Non-Whites. The five-point difference between Future Preparation and the lowest scoring conditions was also statistically significant. Global Competitiveness was the least successful among Whites.

Table B. Mean Ratings for Productivity, Whites and Non-Whites

<u>Value Treatment</u>	Productivity	
	<u>White</u>	<u>Non-White</u>

Future Preparation	**37.69	25.59
FP + Ingenuity	32.92	27.39
FP + Common Good	34.44	27.53
Fairness Across Places	36.79	30.44
Fairness Between Groups (Mild)	37.10	28.57
Fairness Between Groups (Strong)	32.61	27.56
Global Competitiveness	32.33	27.50
Control	36.02	27.77

** Statistically significant from lowest scoring condition $p < .05$.

Efficiency

In the Efficiency battery, higher scores indicate a stronger preference for supporting or taking measures to increase the number of graduates, given resources allocated. Here, Whites again accorded higher scores than Non-Whites. Here, as hypothesized, the mild version of Fairness Between Groups was more successful at improving support for Efficiency measures among Whites, while Fairness Across Places was the most successful among Non-Whites. The least successful values at moving support for Whites and Non-Whites were Global Competitiveness and Future Preparation, respectively. The difference between the highest scoring and lowest scoring conditions was also statistically significant for Whites and Non-Whites.

Table C. Mean Ratings for Efficiency, Whites and Non-Whites

<u>Value Treatment</u>	<u>Efficiency</u>	
	<u>White</u>	<u>Non-White</u>
Future Preparation	31.08	22.46
FP + Ingenuity	30.25	26.57
FP + Common Good	32.45	25.05
Fairness Across Places	32.37	**30.13
Fairness Between Groups (Mild)	**34.50	26.67
Fairness Between Groups (Strong)	29.18	25.37
Global Competitiveness	28.94	26.23
Control	31.78	25.22

** Statistically significant from lowest scoring condition $p < .05$.

Incentive

In the Incentive battery, higher scores indicate a stronger preference for supporting or taking measures to increase the payoff for students taking part in higher education. Here, Whites demonstrated marginally more support for progressive incentive measures than Non-Whites. Here, the Future Preparation plus Common Good value was the most successful at moving support for Whites, while the strong version of Fairness Between Groups was the most successful for Non-Whites. The least successful values for Whites

and Non-Whites were Global Competitiveness and Future Preparation, respectively. The difference between the highest scoring and lowest scoring conditions was not statistically significant for Whites, but was for Non-Whites.

Table D. Mean Ratings for Incentive, Whites and Non-Whites

<u>Value Treatment</u>	<u>Incentive</u>	
	<u>White</u>	<u>Non-White</u>
Future Preparation	37.86	26.59
FP + Ingenuity	37.30	30.02
FP + Common Good	38.07	29.09
Fairness Across Places	37.58	30.41
Fairness Between Groups (Mild)	37.25	29.97
Fairness Between Groups (Strong)	36.76	**32.19
Global Competitiveness	34.74	30.99
Control	37.89	31.22

** Statistically significant from lowest scoring condition $p < .05$.

Responsibility

In the Responsibility battery, higher scores indicate a stronger preference for supporting or taking measures to increase the accountability of those in charge of higher education. Here, Whites evinced marginally more progressive values than Non-Whites, generally. The mild version of the Fairness Between Groups value was the most successful at moving support among Whites, while the strong version of Fairness Between Groups did best at moving support for Non-Whites. The least successful value at moving support for both Whites and Non-Whites was Global Competitiveness. The difference between the highest scoring and lowest scoring conditions was not statistically significant for either Whites or Non-Whites.

Table E. Mean Ratings for Responsibility, Whites and Non-Whites

<u>Value Treatment</u>	<u>Responsibility</u>	
	<u>White</u>	<u>Non-White</u>
Future Preparation	31.87	26.56
FP + Ingenuity	31.43	24.12
FP + Common Good	30.56	24.17
Fairness Across Places	29.26	26.40
Fairness Between Groups (Mild)	32.24	24.08
Fairness Between Groups (Strong)	27.77	*27.59
Global Competitiveness	29.01	23.38
Control	30.17	26.31

Early Learning

In the Early Learning battery, higher scores indicate a stronger preference for supporting or taking measures to increase the amount of material students can access during their education. Here, Whites evinced substantially more progressive attitudes than Non-Whites. The Fairness Across Places value was the most successful at moving support among Whites as well as Non-Whites. The least successful values for Whites and Non-Whites were Future Preparation plus Ingenuity and Future Preparation, respectively. The difference between the highest scoring and lowest scoring conditions was not statistically significant for Whites, but it was for Non-Whites.

Table F. Mean Ratings for Early Learning, Whites and Non-Whites

<u>Value Treatment</u>	Early Learning	
	<u>White</u>	<u>Non-White</u>
Future Preparation	42.05	25.35
FP + Ingenuity	38.45	28.56
FP + Common Good	39.16	29.34
Fairness Across Places	42.83	**32.53
Fairness Between Groups (Mild)	42.19	29.30
Fairness Between Groups (Strong)	39.52	27.18
Global Competitiveness	40.32	28.70
Control	40.19	29.43

** Statistically significant from lowest scoring condition $p < .05$.

Value of College

In the ratings for the Value of College, where higher scores mean attending college is rated as more valuable, Whites again evinced mostly more progressive attitudes than Non-Whites. Here, the mild version of the Fairness Between Groups value was the most successful at moving support for Whites, while the Future Preparation plus Common Good value was the most successful for Non-Whites. The least successful value for Whites and Non-Whites was Future Preparation. The difference between the highest scoring and lowest scoring conditions was not statistically significant for Whites or Non-Whites.

Table G. Mean Ratings for Value of College, Whites and Non-Whites

<u>Value Treatment</u>	Value of College	
	<u>White</u>	<u>Non-White</u>
Future Preparation	35.09	32.47
FP + Ingenuity	36.57	36.12
FP + Common Good	35.57	**40.67
Fairness Across Places	38.87	35.90
Fairness Between Groups (Mild)	39.45	37.04

Fairness Between Groups (Strong)	37.61	36.86
Global Competitiveness	38.49	32.91
Control	36.80	35.32

** Statistically significant from lowest scoring condition $p < .05$.

Evaluating Performance

In the ratings for Evaluating Performance, higher scores indicate a stronger preference for evaluation means like standardized testing. Whites evinced marginally more progressive values than Non-Whites. Here, the Fairness Across Places value was the most successful at moving support among both Whites and Non-Whites. The least successful values among Whites and Non-Whites were the stronger version of Fairness Between Groups and Future Preparation plus Ingenuity, respectively. The difference between the highest scoring and lowest scoring conditions was statistically significant for Whites and Non-Whites.

Table H. Mean Ratings for Evaluating Performance, Whites and Non-Whites

<u>Value Treatment</u>	<u>Evaluating Performance</u>	
	<u>White</u>	<u>Non-White</u>
Future Preparation	57.22	55.40
FP + Ingenuity	58.23	53.41
FP + Common Good	56.41	56.25
Fairness Across Places	**61.00	**58.23
Fairness Between Groups (Mild)	58.88	57.56
Fairness Between Groups (Strong)	55.56	53.92
Global Competitiveness	57.15	56.00
Control	57.79	52.57

** Statistically significant from lowest scoring condition $p < .05$.

Scope of Government

In the ratings for Scope of Government, higher scores indicate preferences for more government intervention in higher education. Whites demonstrated more progressive attitudes than Non-Whites, in general. Here, the mild version of the Fairness Between Groups value did best at moving support among Whites, and the strong version of the Fairness Between Groups value was the most successful at moving support for Non-Whites. Global Competitiveness and Future Preparation obtained the lowest scores for Whites and Non-Whites, respectively. The difference between the highest scoring and lowest scoring conditions was statistically significant for Whites and Non-Whites.

Table I. Mean Ratings for Scope of Government, Whites and Non-Whites

<u>Value Treatment</u>	Scope of Government	
	<u>White</u>	<u>Non-White</u>
Future Preparation	56.41	39.13
FP + Ingenuity	56.38	43.71
FP + Common Good	55.16	47.49
Fairness Across Places	58.66	45.76
Fairness Between Groups (Mild)	**60.14	43.36
Fairness Between Groups (Strong)	58.71	**47.71
Global Competitiveness	55.87	43.48
Control	53.88	43.74

** Statistically significant from lowest scoring condition $p < .05$.

Composite Higher Education

In the ratings for Composite Higher Education, higher scores indicate preferences for progressive higher education reform. Whites demonstrated more progressive attitudes than Non-Whites, in general. Here, the mild version of the Fairness Between Groups value did best at moving support among Whites. The Future Preparation plus Common Good value was the most successful at moving support for Non-Whites. Future Preparation plus Common Good and Future Preparation obtained the lowest scores for Whites and Non-Whites, respectively. The difference between the highest scoring and lowest scoring conditions was statistically significant for Non-Whites.

Table J. Mean Ratings for Composite Higher Education, Whites and Non-Whites

<u>Value Treatment</u>	Composite Higher Ed.	
	<u>White</u>	<u>Non-White</u>
Future Preparation	52.70	34.82
FP + Ingenuity	53.24	39.21
FP + Common Good	50.42	**43.47
Fairness Across Places	53.02	41.58
Fairness Between Groups (Mild)	54.28	40.53
Fairness Between Groups (Strong)	53.04	39.62
Global Competitiveness	52.72	38.98
Control	52.70	34.82

** Statistically significant from lowest scoring condition $p < .05$.

ⁱ http://www.frameworksinstitute.org/assets/files/framebytes/FrameByte_fairness_frames.pdf

ⁱⁱ Ibid.

ⁱⁱⁱ http://www.frameworksinstitute.org/assets/files/PDF_race/fwraceandimmig5july3bf.pdf

^{iv} See [FrameWorks Message Brief: Framing Race](http://www.frameworksinstitute.org/race.html) (2008), <http://www.frameworksinstitute.org/race.html>

^v This value also formed the basis of the message credibility test as it was refined into three versions: one with no messenger, one with a public messenger, and one with a private messenger.

^{vi} This value was presented in two versions (mild and strong) in order to test for differential effects across racial groups, on the hypothesis that Whites would be more likely to respond favorably to a mild treatment and Non-Whites to a stronger assertion of group inequality. See [FrameWorks Message Brief: Framing Race](http://www.frameworksinstitute.org/race.html) (2008), <http://www.frameworksinstitute.org/race.html>