

## **Campaign Responses to Questions from The Association for Women in Science & The Society of Women Engineers**

**(1) In a September 2006 report, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*, the National Academies stated that, in order to maintain scientific and engineering leadership amid increasing economic and educational globalization, the United States must aggressively pursue the innovative capacity of all people, regardless of sex. Although women make up almost half of the U.S. workforce, they continue to be underrepresented in STEM professions, particularly in the higher academic faculty ranks and leadership positions. As President of the United States, how do you plan to address the need for more women in STEM?**

**Senator Barack Obama**  
October 13, 2008

Joe Biden and I agree with the conclusion of the National Academies' *Bias and Barriers* report that the United States must aggressively pursue the innovative capacity of all people. In a globalized world, our prosperity and national security depend on our ability to lead the world in innovation. Other nations are now challenging that leadership, and in responding we must call upon talent and creativity of all of our people. We will need to significantly increase our STEM workforce, and to do that we will need to engage not just women and minorities but also persons with disabilities, English language learners, and students from low income families.

Women are significantly underrepresented in the STEM workforce, and especially in the leadership positions in research and academia. We need women in leadership roles both for their contribution and for the message of encouragement and opportunity that their presence sends to our daughters. We support a range of

**Senator John McCain**  
October 15, 2008

I am committed to ensuring a diverse workforce. Discrimination on the basis of sex is abhorrent, and my administration will vigorously enforce federal anti-discrimination laws. All people should have the opportunity to reach their potential based on merit and hard work.

It is also important that we strengthen our public education system's focus on math, science, and engineering to spark children's interest in those important fields. That is why I have proposed a dramatic overhaul of Title II of No Child Left Behind to provide funding for incentive bonuses for teachers who choose to teach those subjects. I also support providing funding for low-income students to hire tutors and for local districts to expand online educational opportunities—initiatives that will ensure that learning continues outside of the classroom.

proactive measures that will open opportunities in science to women, such as requiring minority and female representation on government panels developing innovation and competitiveness strategies, and establishing mentoring programs to support women and underrepresented groups in STEM education programs - two measures that I helped pass as part of the America COMPETES Act. We also support improved educational opportunities for all students, increased responsibilities and accountability for those receiving federal research funding, equitable enforcement of existing laws such as Title IX, continuation and strengthening of programs aimed at broader engagement in the STEM disciplines, full funding for the America COMPETES Act, and increased funding for the National Institutes of Health.

**(2) What is your position on H.R. 6314, the “Fulfilling the Potential of Women in Academic Science and Engineering,” recently introduced by Representative Eddie Bernice Johnson (DTX)?**

**Senator Barack Obama**

Representative Eddie Bernice Johnson has long been an advocate for underrepresented groups in the STEM fields. H.R. 6314 aims to strengthen policies and increase the accountability of the federal science agencies around issues of recruitment and retention of women in science and engineering. Joe Biden and I endorse these efforts.

**Senator John McCain**

I strongly oppose discrimination on the basis of sex in the awarding of federal grants. As President, I will closely examine any legislation addressing this issue that reaches my desk.

**(3) For the past thirty-six years, Title IX has been applicable to all educational programs that have received federal funds and not just collegiate athletics. Despite this law, however, there have been indications that it has not been evenly enforced by all federal funding agencies nor adhered to by all educational institutions, as the law initially intended. As President, how would you seek to ensure that Title IX is**

**evenly applied to all sectors of academia, including STEM departments, rather than just athletics?**

**Senator Barack Obama**

Title IX has had an enormous impact on women's opportunities and participation in sports as we have recently seen in the tremendous success of our athletes at the Beijing Olympics. Title IX, though, does not even mention sports. It applies to all educational programs that receive federal funding. If pursued with the necessary attention and enforcement, Title IX has the potential to make similar, striking advances in the opportunities that girls have in the STEM disciplines. For 35 years, Title IX has been a bulwark against sex discrimination against students and employees at all levels of education. Joe Biden and I will fight to make sure women have equal opportunities and access from pre-kindergarten through graduate school.

**Senator John McCain**

In 1972, when Title IX was enacted, women were at a great disadvantage in many facets of our society. The law was designed to provide girls and women with equal opportunities in both academics and athletics through a balanced combination of access and funding. I will enforce Title IX according to its original intent, which means that it should be enforced in both academics and athletics.

I am concerned, however, that the Clinton administration took unwise liberties in interpreting Title IX, with the consequence that many schools have adopted policies of strictly equal funding for male and female athletic programs. Unfortunately, many popular athletic programs have been cut because the overall amount of funding available for athletics programs will not sustain identical men's and women's programs in every sport. I will bring people together to work to find ways to help make Title IX accomplish its original intent without causing the elimination of athletic programs. And I will not let this flawed interpretation adopted by the Clinton administration affect the funding of academic programs.

**(4) This fall, voters in Nebraska and Colorado will consider anti-affirmative action initiatives that could affect existing programs which, many feel, have helped establish more opportunities for women and minorities while improving the gender, racial, and ethnic diversity in educational institutions and in workplaces. What is your position on these anti-affirmative action initiatives?**

**Senator Barack Obama**

We believe in a country in which opportunity is available to all Americans, regardless of their race, gender, or economic status. That's why we oppose these ballot initiatives, which would roll back opportunity for millions of

**Senator John McCain**

I support the initiatives because they are limited to preventing preferences on the basis of race, sex, or ethnicity in state programs. In my view, our efforts to create

Americans and cripple efforts to break down historic barriers to the progress of qualified women and minorities. We recognize the need to maximize the talent pool that the United States brings to the Science and Engineering enterprise. It would be unfortunate if anti-affirmative action initiatives distracted us from the pressing need to develop and exploit the talent of all of our citizens, including women, minorities, persons with disabilities, English language learners, and students from low income families. Yet even as we continue to defend affirmative action as a useful, if limited, tool to expand opportunity to underrepresented populations, we should consider spending a lot more of our political capital convincing America to make the investments needed to ensure that all children perform at grade level and graduate from high school—a goal that, if met, would do more than affirmative action to help those students who need it the most. And while Joe Biden and I support affirmative action, we also support efforts to increase opportunities for qualified men and women from low-income backgrounds to attend colleges and universities – regardless of their race or gender.

opportunity should focus on those who are disadvantaged, regardless of race, sex, or ethnicity. For example, in creating educational opportunity, we should concentrate on poorly performing schools that are not effective at educating students. By the same token, in recruiting a well-qualified workforce, we should cast a wide net to ensure that the paths to advancement remain open to all people.

**(5) The National Science Foundation (NSF) currently has several programs intended to broaden participation in the STEM fields, i.e. the ADVANCE program. As President, how do you plan to maintain and/or strengthen existing NSF programs targeted to increasing diversity in STEM education?**

**Senator Barack Obama**

The ADVANCE program, which aims at institutional transformation, has been hugely successful in creating academic environments that work for everyone. The NSF should continue to fund ADVANCE as well as its other STEM programs that aim to broaden engagement, and it should share the lessons learned with a broader community. In addition to specific programs aimed at broadening engagement, the NSF has added a broader impact merit review criteria for all

**Senator John McCain**

Increasing the representation of women in STEM fields is an important goal. In the first year of my administration, I will conduct an in-depth review of nearly all federal discretionary spending, evaluating programs for effectiveness and cost. Programs run by the National Science Foundation will be part of that review process. I will support programs that increase the representation of women in science fields in a cost-effective manner

proposals. This criteria aims to capture the larger benefits of a research project to society. It can be met in a variety of ways, including activities aimed at increasing the numbers and successes of students from underrepresented groups. It has made funded scientists and engineers more aware of their responsibility to engage all students in education and research. Other federal agencies should be encouraged to adopt similar review standards for research.

without resort to preferences on the basis of sex.

**(6) Women on average bear more of the family caregiving responsibilities than men. States such as California, Washington, and New Jersey have implemented paid family leave policies that provide partially paid leave for employees who need to care for seriously ill family members, newborns, and adoptive or foster children. What do you believe is the responsibility of the federal government with regard to paid family leave?**

**Senator Barack Obama**

According to the National Partnership for Women and Families, 78 percent of employees covered by the FMLA who have needed leave but have not taken it report that it is because they could not afford to take unpaid leave. Of those employees who could not afford leave, nearly 88 percent report that they would have taken leave if they had been able to receive some pay while away from work. Furthermore, access to paid leave is correlated with income and education, with low-income families least likely to have the resources or savings to compensate for time off. As president, I will initiate a 50 state strategy to encourage all of the states to adopt paid-leave systems. I will provide a \$1.5 billion fund to assist states with start-up costs and to help states offset the costs for employees and employers. And my Department of Labor will also provide technical information to the states on how to craft paid-leave programs consistent with their local needs.

**Senator John McCain**

I strongly support helping those who take time off to care for sick family members or young children. That is why I broke from my party in 1993 to support the Family and Medical Leave Act, which requires employers to give employees 12 weeks of unpaid leave to care for a newborn child, to look after a sick family member, or to recuperate from a serious illness. This law has helped working mothers balance the needs of family and career. More recently, I co-sponsored the Family Friendly Workplace Act, which would permit employees to receive paid time off in lieu of overtime wages if they so choose.

It is also important that we promote a more flexible work environment. To achieve that goal, as President I will establish a National Commission on Workplace Flexibility and Choice. This Commission will bring together a bipartisan set of leaders representing workers, small and large employers, labor, and academics. The Commission will make

recommendations to the President on how modernizing our nation's labor laws and training programs can help workers better balance the demands of their job with family life and to enable workers to more easily transition between jobs. The Commission will examine issues such as: modernizing the nation's labor laws so that they allow for more flexible scheduling arrangements; ensuring that the nation's labor laws don't get in the way of working at home; promoting telework so that workers can spend less time commuting; making health more portable so that workers don't lose their benefits when they switch jobs; ensuring that workers can choose retirement plans that best suit their needs; and providing workers with more choice in job training assistance so that they can build the skills they need for new and better jobs.

**(7) Last summer, the America COMPETES Act (P.L. 110-69), a bipartisan authorization bill to bolster U.S. competitiveness through sustained investments in science and engineering research and STEM education, was signed into law. To date, appropriations for the America COMPETES programs have not been consistent with the levels authorized by this bill. As President, how will you seek to ensure that this law is followed and that these funding levels are realized?**

**Senator Barack Obama**

I cosponsored the America COMPETES Act and added several amendments that help to improve the diversity of our STEM workforce. One amendment required that minorities and females be represented and consulted during the development of innovation/competitiveness strategies at the National Science and Technology Summit (NSTS), on the President's Council on Innovation and Competitiveness, and elsewhere, and another established a mentoring program to support women and underrepresented groups as they progress through education programs proposed by the Department of Energy.

**Senator John McCain**

I strongly supported the America COMPETES Act, which works toward one of the key goals of my education platform: increasing our students' proficiency in math and science. America's ability to compete in the global market is dependent on the availability of a skilled workforce. Less than 20 percent of our undergraduate students obtained degrees in math or science, and the number of computer science majors has fallen by half over the last eight years. I will fully fund the America COMPETES Act to help reverse these trends in education and training.

I have been greatly disappointed that the Bush administration has failed to invest the necessary money in the America COMPETES programs. Intransigence on the budget made it impossible to find the money needed to support its goals. It will plainly be impossible to meet these goals if my opponent in this election follows through on his promise to freeze domestic discretionary spending. Joe Biden and I, however, are strongly committed to doubling basic research budgets over ten years at federal agencies that include the NSF, the Office of Science in the Department of Energy, and the National Institute of Science and Technology. And we are committed to predictably increasing the budget of the National Institutes of Health at a similar rate, and are pleased that there is bipartisan consensus to roll back this administration's lack of investment in important life sciences research.