

National Commission on Innovation and Competitiveness Frontiers

Working Group on Developing, Supporting, and Expanding the Modern Innovation Workforce

Session 2 Discussion Guide

Tuesday, October 17th, 2023

3:30 p.m. to 5:00 p.m.

Agenda

- 3:30-3:45 – Welcome & Recap
- 3:45-4:45 – Topic #2 Discussion
- 4:45-5:00 – Conclusion & Next Steps

Background & Context

The Future of Work: Developing, Supporting, and Expanding the Modern Innovation Workforce charter identifies five broad issue areas for the Commission and its Working Groups to explore:

- 1) Revitalizing U.S. education and training systems to foster a high-skilled future workforce.
- 2) Leveraging telework capabilities, digitalization, and emerging technologies to augment conventional work.
- 3) Navigating workforce challenges and opportunities created by increased automation.
- 4) Adapting to rapid labor force shifts and new models of work organization.
- 5) Expanding efforts to increase diversity and inclusion in the innovation workforce.

When this Working Group met in September 2023, discussion focused on strengthening the future workforce by reorienting the education system and inspiring young students. Specifically, the group identified five key themes:

- Reorienting educational approaches to emphasize experiential learning and cross-disciplinary collaborations
- Revitalizing a spirit of inspiration for K-12 students through increased exposure to science
- Improving workforce development planning efforts by broadening stakeholder engagement
- Expanding access to education and workforce development efforts with a focus on under-served/utilized communities and demographics
- Measuring and evaluating workforce development efforts to maximize impact and efficiently allocate resources

The goal of this and future Working Group sessions is to drive toward concrete policy recommendations.

The priority topic for today's session is navigating workforce challenges and opportunities posed by automation and technological advancement.

The questions below are intended to guide discussion and provide food for thought. Not all questions need to be directly addressed during the Working Group session. Moderators and Working Group participants will collaboratively shape discussion around priority issues.

Discussion: Navigating Workforce Challenges and Opportunities of Automation

The advent of generative AI and the increasing adoption of automation has created a unique moment for the U.S. workforce. While fears of job replacement by AI grow, so does excitement over new possibilities for innovation and productivity. **How can policymakers and the private sector mitigate the negative effects of a shift to automation while amplifying positive impacts for the workforce?**

Building Understanding Around the Benefits of Increased AI Adoption

- Given the general public wariness of AI and its potential workforce impacts, what role can universities, governments, and private organizations play in demonstrating the potential benefits and opportunities of AI, particularly for the U.S. workforce?
 - What would it look like for AI to augment, change, and expand opportunities for American workers?
 - What can and should be done to mitigate the potential negative impacts of increased AI adoption?
 - What strategies and practices should be put in place to manage the transition to increased AI adoption and the changing nature of work? Even if the net effect of AI adoption is not labor displacement, how should we prepare for its inevitable “change” on the nature of work? What promising opportunities are presented by the integration of technologies like AI and autonomous systems?
 - What new jobs or industries will be created, and how can policymakers support the transition into these new fields?

Supporting the Aging Workforce

- Given rapid technological shifts, how can older workers best be supported through this transition?
 - Are new workforce training programs targeted at older workers seeking to re-skill or up-skill necessary? Who is best positioned to operate these programs?
 - How can the institutional knowledge of older workers be leveraged to optimize AI integrations and shifts to automation?
 - Are there other segments of the workforce that merit special attention during the rapid reallocation of labor?

Conclusion & Next Steps

- The Council will present initial findings from this group and our three other Working Groups at our annual National Competitiveness Forum on December 14th and 15th. A short summary, akin to last session, will be sent to Working Group participants shortly.