The results of this research have implications for individuals, educational institutions, business, and government. To be successful in the next decades, individuals will need to demonstrate foresight in navigating a rapidly shifting landscape of organizational forms and skill requirements. They will increasingly be called upon to continually reassess the skills they need, and quickly put together the right resources to develop and update these.

Our educational institutions are largely the products of technology infrastructure and social circumstances of the past. The landscape has changed and educational institutions should consider how to adapt quickly in response. Some directions of change might include:

- Placing additional emphasis on developing skills such as critical thinking, insight, and analysis capabilities
- Integrating new-media literacy into education programs
- Including experiential learning that gives prominence to soft skills—such as the ability to collaborate, work in groups, read social cues, and respond adaptively
- Broadening the learning constituency beyond teens and young adults through to adulthood
- Integrating interdisciplinary training that allows students to develop skills and knowledge in a range of subjects

Businesses must also be alert to the changing environment and adapt their workforce planning and development strategies to ensure alignment with future skill requirements. Strategic human resource professionals might reconsider traditional methods for identifying critical skills, as well as selecting and developing talent. A workforce strategy for sustaining business goals should be one of the most critical outcomes of human resource professionals, and should involve collaborating with universities to address lifelong learning and skill requirements.

Some directions of change might include:

- Integrating interdisciplinary training that allows students to develop skills and knowledge in a range of subjects
- Broadening the learning constituency beyond teens and young adults through to adulthood
- Integrating new-media literacy into education programs
- Placing additional emphasis on developing skills such as critical thinking, insight, and analysis capabilities

To obtain a copy of the full research report, please contact Apollo Research Institute at www.apolloresearchinstitute.org

© 2011 Institute for the Future for Apollo Research Institute. All rights reserved. Reproduction prohibited without written consent. SR-1382B
Future Work Skills 2020

While all six drivers are important in shaping the landscape in which each skill emerges, the color-coding and placement here indicate which drivers have particular relevance to the development of each of the skills.

**KEY**
- Drivers—disruptive shifts that will reshape the workforce landscape
- Key skill needed in the future workforce

---

**extreme longevity**
Increasing global lifespans change the nature of careers and learning

- Trans-disciplinarity

**computational world**
Massive increase in sensors and processing power make the world a programmable system

- Design Mindset
- Virtual Collaboration
- Cross Cultural Competency
- Cognitive Load Management
- New Media Literacy
- Computational Thinking
- Social Intelligence
- Novel and Adaptive Thinking

---

**rise of smart machines and systems**
Workplace robotics nudge human workers out of rote, repetitive tasks

- Sense-Making

---

**new media ecology**
New communication tools require new media literacies beyond text

- New Media Literacy

---

**globally connected world**
Increased global interconnectivity puts diversity and adaptability at the center of organizational operations

- Superstructed organizations

---

**© 2011 Institute for the Future for Apollo Research Institute. All rights reserved.**