Shaping the Future of Readiness:
A Discussion and Facilitation Guide

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KnowledgeWorks

Introduction:
Redefining Readiness for a New Era

Employment, educational, and community leaders face a critical window of choice. Even today, graduates' skill sets and employers' needs are often out of sync.[1] As explored in KnowledgeWorks' strategic foresight publications, work is changing rapidly, which could widen that gap.[2] Exponential advances in digital technologies, the rise of smart machines, and the decline of full-time employment suggest that our future could look dramatically different from today's realities. By looking at changes on the horizon, leaders have the opportunity to redefine readiness for this new era and align their work to meet learners', workers', and employers' future needs. Due to the magnitude of change on the horizon, no one organization or system can address future readiness needs on its own. The level and pace of change require both long-term thinking and cross-sector action.

This discussion and facilitation guide aims to assist community conveners in supporting meaningful multi-sector and action-oriented discussions that lead to concrete next steps that support future workforce development.

1. Strada Education Network & U.S. Chamber of Commerce Foundation. (2017). Learning to Work and Working to Learn. Retrieved from https://www.uschamberfoundation.org/reports/learning-work-working-learn.
2. Prince, K., Saveri, A. & Swanson, J. (2017) The Future of Learning: Redefining Readiness from the Inside Out. KnowledgeWorks. Retrieved from http://www.knowledgeworks.org/redefining-readiness.

Using This Discussion and Facilitation Guide

This guide contains three structured group activities:

- **EXPLORING THE FUTURE OF WORK**
  Explore broad and local changes on the horizon and consider how the future of work might unfold.

- **CREATING A NEW PROFILE OF A GRADUATE**
  Consider what knowledge, skills, and dispositions might help young people thrive in a new world of work and what learning experiences they might need.

- **LEVERAGING CROSS-SECTOR OPPORTUNITIES**
  Highlight ways different sectors and organizations can collaborate to support future college and career readiness.

When facilitating an event using this guide, consider the following factors:

Time: Each activity can be completed in 45 minutes. The activities are meant to be used in sequence, though they do not need to be completed all at once. Conveners are encouraged to extend discussion or reflection time as useful.

Space: The activities should be completed in a space appropriate for small-group work and all-group discussion and sharing.

Group size: The ideal size for these types of discussions is fifteen to forty people. The exercises within each activity are designed to be completed by groups of three to five people. The discussion and reflection questions can be completed either individually, in small groups, or in a larger group.

Materials: Each group of three to five people will need at least one copy of the charts included in this guide to complete the exercises. Conveners may decide that each individual should have a copy or that groups should recreate the charts on larger flip chart paper.

Audience: The discussions and exercises are designed with a cross-sector group of K-12, business, postsecondary, and community leaders in mind. When possible, involving students, recent graduates, and parents can also yield important insights. Conveners are encouraged to bring together audiences that represent diverse perspectives and areas of expertise and that reflect and represent the communities in which the conversations are being held.

Customization: These activities are based on KnowledgeWorks' extensive experience facilitating interactive workshops with multi-sector audiences. However, conveners are encouraged to adapt the activities and timing and to incorporate them into their programs in ways that meet the needs of their groups and communities.

We owe it to current and future students to reframe our approaches to readiness. How we choose to engage on this topic will shape how equitable, productive, and vibrant our collective futures will be. Redefining readiness for the emerging era is the most urgent issue on the horizon for education and employment stakeholders.

Activity 1: Exploring the Future of Work

Objective
Participants will identify trends, drivers of change, existing efforts, and potential disruptions that could change the future of work and will consider their potential impacts.

Process
- Read and discuss "Introduction: The Changing Nature of Work" (10 minutes)
- Complete the "Changes on the Horizon" exercise (15 minutes)
- Complete the "Considering Possible Futures" exercise (10 minutes)
- Discuss "Reflection: Your Work Today" (10 minutes)

Introduction: The Changing Nature of Work
KnowledgeWorks' publication, "The Future of Learning: Redefining Readiness from the Inside Out"[3] outlined two major drivers that could shape the future of work.

The Rise of Smart Machines
Advances in artificial intelligence, machine learning, and robotics and other forms of automation are leading to the rise of smart machines that will increasingly be able to perform tasks that people carry out today. As smart machines develop further and get cheaper, they will alter or eliminate many routine cognitive and manual tasks, or tasks that are rule-based and repetitive. They will also increasingly impact the non-routine cognitive and manual tasks that are often associated with knowledge-based work, creative work, and care-based professions.

The Decline of the Full-Time Employee
Technology is also changing the structure of work, due in large part to the lower coordination costs afforded by the Internet and the access to an expanded labor pool resulting from globalization. The Internet is making it increasingly cost effective for firms to access people with specialized skills on the open market instead of employing people full-time. Globalization has opened up an international talent pipeline and continues to give firms access to cheaper labor markets and specialized talent. Such shifts are contributing to shortening employment tenure, the spread of contingent and project-based work, and the rise of taskification, or the breaking down of formal jobs into discrete tasks, often at lower wages and with informal job structures.

These drivers of change are being made more pronounced by technological acceleration. While it is clear that these drivers of change are transforming work, there is significant uncertainty about what work will look like in 2040.

Discussion Questions
- What are your initial reactions to these drivers?
- What aspects of the drivers feel most relevant locally?
- How are stakeholders in your region responding to the changing nature of work?

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3.   Prince, K., Swanson, J. & King, K. (2015). Shaping the Future of Learning: A Strategy Guide. KnowledgeWorks. Retrieved from http://www.knowledgeworks.org/shaping-future-learning-strategy-guide.

Exercise: Changes on the Horizon

Discuss how other trends, drivers of change, existing efforts, or potential disruptions might affect the future of work in your area. Use the examples in the chart to guide you, and complete the chart with your own ideas.

TIP

Trend: A pattern of change over time. Can be characterized as "more of" or "less of" something or as something "increasing" or "decreasing." Consider trends across categories: social, technological, economic, environmental, and political.

Driver of Change: A major shift combining multiple trends that creates a broad pattern of change.

Effort: An existing plan, intention, or program.

Potential Disruption: An event that could alter a pattern of change.

TRENDS	DRIVERS OF CHANGE	EFFORTS	POTENTIAL DISRUPTIONS
– Increasing income inequality	– Rise of smart machine – Decline of full-time employment	– Regional effort to match students to internships and apprenticeships for in-demand industries and careers.	– Major employer leaves/arrives

Compare the changes in your chart with those identified by another individual or group, noting similarities and differences.

Exercise: Considering Possible Futures

Given the changes from KnowledgeWorks' research and those that you identified, explore what employment landscape today's youngest children might find themselves entering in 2040. Select one or more of the trends, drivers of change, efforts, or potential disruptions and extrapolate forward to envision a different future. Use the examples in the chart to guide you, and complete the chart with your own ideas.

TIP

As you work, remember that exactly how a change will shape the future is uncertain; considering a range of possible futures, some of which may contradict one another, can help stakeholders consider and plan for any number of possibilities that might emerge.

CHANGE *Trend, driver, effort, or disruption that could change the future of work*	POSSIBLE FUTURES OF WORK *Possible future outcomes of those changes*
– Rise of smart machines	– *What if smart machines augmented the contributions of people in the workplace, creating new jobs; reconfiguring current work; and making many jobs safer, easier and more interesting?*

Reflection: Your Work Today

Looking at the possibilities that you identified, reflect on what they might mean for your organizations and for your local area. You may use the following questions to guide your reflection.

1 Do your existing structures, policies, programs, and missions support people in ways that would help them thrive in the futures of work you envisioned?

_____

_____

_____

2 What might need to change to orient your organizations and your offerings toward future possibilities?

_____

_____

_____

3 Where might you need to explore new forms of collaboration or deepen existing partnerships?

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_____

_____

4 Where might the region need new developments to help address issues related to future readiness?

_____

_____

_____

Activity 2: Creating a New Profile of a Graduate

Objective
Participants will identify the knowledge, skills, and dispositions that will be critical for workers to thrive in a changing and uncertain landscape.

Process
- Read and discuss "Introduction: A New Foundation for Readiness" (10 minutes)
- Complete the "A New Profile of a Graduate" exercise (15 minutes)
- Complete the "Attributes of a Future Learning Experience" exercise (10 minutes)
- Discuss "Reflection: Today's Learning Experiences" (10 minutes)

Introduction: A New Foundation for Readiness
Despite critical uncertainties about how the future might unfold, we can expect the employment landscape to change very rapidly. Stakeholders need to anticipate how work might evolve and need to redefine readiness for a new era. The new foundation for readiness shown on the next page promises to provide a foundation for success regardless of exactly how the rise of smart machines and decline of the full-time employee end up affecting work in 2040. It contains three elements as detailed below:
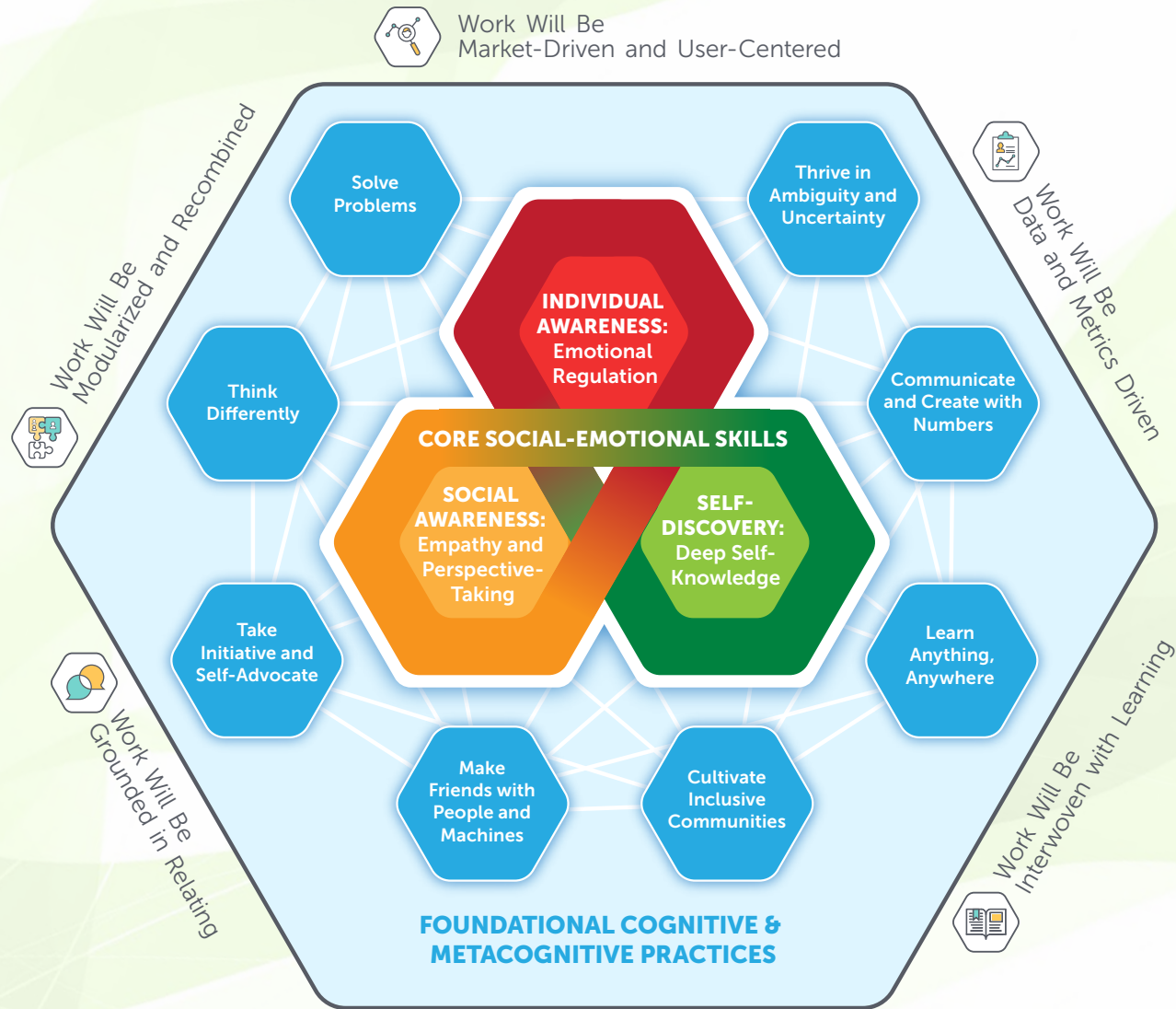
- Future work characteristics, which describe likely features of any future work landscape;
- Core social-emotional skills, which outline the foundational skills that will enable people to thrive in future workplaces; and,
- Foundational cognitive and metacognitive practices, which represent knowledge, skills, and dispositions that will help people navigate, adapt, and grow in the emerging work environment.

Discussion Questions
- What are your initial reactions to this new foundation for readiness?
- Which of these skills and practices are already a focus of education and workforce development efforts in your area?
- How do you think these skills and practices could be developed alongside additional academic and job-specific skills?

A New Foundation for Readiness

Work Will Be
Market-Driven and User-Centered

Work Will Be Modularized and Recombined

Work Will Be
Data and Metrics Driven

Solve Problems

Thrive in Ambiguity and Uncertainty

INDIVIDUAL AWARENESS: Emotional Regulation

Think Differently

CORE SOCIAL-EMOTIONAL SKILLS

Communicate and Create with Numbers

SOCIAL AWARENESS: Empathy and Perspective-Taking

SELF-DISCOVERY: Deep Self-Knowledge

Take Initiative and Self-Advocate

Learn Anything, Anywhere

Make Friends with People and Machines

Cultivate Inclusive Communities

Work Will Be Grounded in Relating

Work Will Be Interwoven with Learning

FOUNDATIONAL COGNITIVE & METACOGNITIVE PRACTICES

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Exercise: A New Profile of a Graduate

Discuss which knowledge, skills, and dispositions from the new foundation for readiness seem most critical and what else young people might need to thrive in the future. Use the examples in the chart to guide you, and complete the chart with your own ideas.

KNOWLEDGE	SKILLS	DISPOSITIONS
– Historical context	– Learn anything, anywhere	– Thrive in ambiguity and uncertainty

Exercise: Attributes of a Future Learning Experience

Given the knowledge, skills, and dispositions you identified, consider the attributes future learning experiences should and should not have to support their development. Use the examples in the chart to guide you, and complete the chart with your own ideas.

TIP

Consider K-12, postsecondary, employment, and community-based experiences that could support learners of all ages.

ATTRIBUTES FUTURE EXPERIENCES NEED TO HAVE	ATTRIBUTES FUTURE EXPERIENCES NEED TO AVOID
– Opportunities for reflection	– One-size fits all
– People to collaborate with diverse groups	– Disconnection from life outside of school

Reflection: Today's Learning Experiences

Looking at the possibilities that you identified, reflect on what they might mean for your organizations and for your local area. You may use the following questions to guide your reflection.

1 To what extent do experiences in your community have the attributes that you identified as being desirable?

_____

_____

_____

2 To what extent do they have the attributes that you identified as being undesirable?

_____

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_____

3 What might need to change to orient your organizations and your offerings toward the future graduate profile you created?

_____

_____

_____

4 What gaps might need to be filled in your region?

_____

_____

_____

Activity 3: Leveraging Cross-Sector Opportunities

Objective
Participants will identify opportunities to work across sectors and boundaries in ways that support college and career readiness and meet the needs of the region.

Process
- Read and discuss "Introduction: Opportunities to Shape the Future" (10 minutes)
- Complete the "Future Opportunities in Your Context" exercise (15 minutes)
- Complete the "Defining Next Steps" exercise (10 minutes)
- Discuss "Reflection: Influencing Future Readiness" (10 minutes)

Introduction: Opportunities to Shape the Future
To identify opportunities to shape the future, KnowledgeWorks explored future possibilities with a wide range of stakeholders. The following five opportunities from "Shaping the Future of Learning: A Strategy Guide"[4] capture stakeholders' key insights. These opportunities can serve as starting points for leaders who hope to influence how young people are prepared for the future.

360 Degree Learners
How can we **educate the whole person** and enable lifelong learning that supports academic and social-emotional growth?

The Whole, and the Sum of Its Parts
How can we **personalize learning in community**, reorienting education around learners while strengthening society?

Elastic Structures
How can we **create flexible approaches to learning and coordination** that respond to learners' needs?

Innovation with Intent
How can we **ground systems change in equity**, including and supporting underserved learners?

The New A+
How can we **renegotiate definitions of success**, examining what education systems aim to achieve and who gets to say?

Discussion Questions
- What are your initial reactions to these areas of opportunity?
- Which of these opportunities are already being addressed by stakeholders in your region? How?
- Which of these opportunities, if addressed fully, would have the most impact on readiness locally?

4.   Prince, K., Swanson, J. & King, K. (2016). Shaping the Future of Learning: A Strategy Guide. KnowledgeWorks. Retrieved from http://www.knowledgeworks.org/shaping-future-learning-strategy-guide.

Exercise: Future Opportunities in Your Context

Select the opportunity from the introduction that promises to have the most impact locally or that is already the focus of stakeholders' efforts in your region.

TIP

Consider local efforts, levers for and barriers to change that relate to the opportunity, and aspirational ideas that could lead to meaningful change.

LOCAL EFFORTS *What is already underway locally to address this opportunity?*	LEVERS FOR CHANGE *What could be leveraged to address the opportunity? Think of partnerships, policies, funding sources, events, or new efforts that could promote change.*	BARRIERS TO CHANGE *What might get in the way of being able to address the opportunity fully?*	ASPIRATIONAL IDEAS *How might you address the opportunity if you had no limits? Think in terms of "What if we…?"*

Exercise: Defining Next Steps

Complete the chart below, considering what stakeholders in your area would need to start doing, stop doing, do more, and do less to address the opportunity you have been exploring in ways that could lead to meaningful change.

START DOING	
ACTION	WHO SHOULD TAKE THAT ACTION?

STOP DOING	
ACTION	WHO SHOULD TAKE THAT ACTION?

DO MORE	
ACTION	WHO SHOULD TAKE THAT ACTION?

DO LESS	
ACTION	WHO SHOULD TAKE THAT ACTION?

Reflection: Influencing Future Readiness

Looking at the possibilities that you identified, reflect on what they might mean for your organizations and for your local area. You may use the following questions to guide your reflection.

1 Which of the actions that you identified seem most likely to impact the future of readiness in your area?

_____

_____

_____

2 Which actions seem most approachable; which ones, most difficult?

_____

_____

_____

3 Where do you see room to take even a small step forward in addressing future readiness in your area?

_____

_____

_____

4 What would you want others in your organization, sector, or collaborative to be thinking about to respond to future possibilities?

_____

_____

_____

Conclusion: Leading the Future

Navigating the future is always challenging work. Charting a course forward is like aiming for a blurry horizon that shifts constantly as forces of change swirl together in different ways and as people's decisions and actions change the landscape along the way. At this time of rapid change and increasing complexity, with profound changes on the horizon for the future of work and readiness, the course can seem especially challenging. But stakeholders must be willing to exercise courageous leadership to address the crucial issues of our time. We need to develop strong future-facing visions that will guide our efforts to overcome the inertia of the status quo, form effective strategies, and bring others along on the journey. We must collaborate to help everyone be ready to navigate the new employment and readiness landscape on the horizon.

Further Reading

DOWNLOAD

The Future of Learning:
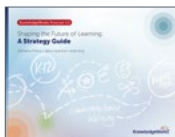### Redefining Readiness from the Inside Out

This resource explores how readiness for further learning, work and life may be redefined to better prepare students for an uncertain future. By proposing a new foundation for readiness based on core social-emotional skills, it offers education stakeholders a framework for helping all students develop the skills needed to succeed in possible employment landscapes of 2040.

DOWNLOAD

The Future of Learning:
Education in the Era of Partners in Code

Over the next decade, our lives will become so inextricably linked with our digital companions that we can expect to find ourselves living as partners in code. These changes will open a wide set of possibilities for education that we all can help shape. Order print copies of KnowledgeWorks' fourth comprehensive forecast on the future of learning to explore how five drivers of change might impact people, structures, and society, as well as potential opportunities and challenges on the horizon.

DOWNLOAD

Shaping the Future of Learning:
A Strategy Guide

This resource explores five foundational issues facing education as we look ahead to 2025 and summarizes strategies to help K-12 schools; informal and community-based learning organizations, such as museums and libraries; and higher education institutions create a future that serves all learners well.

KnowledgeWorks

KnowledgeWorks is a nonprofit organization dedicated to advancing personalized learning that empowers every child to take ownership of their success. With nearly 20 years of experience exploring the future of learning, growing educator impact and working with state and federal policymakers, our passionate team partners with schools and communities to grow a system-wide approach to sustain student-centered practices so that every child graduates ready for what's next.

Learn more at KnowledgeWorks.org.