WE'RE GLAD YOU'RE HERE!

We will begin promptly at 4pm

HOUSEKEEPING & LOGISTICS

- **The link to the recording will be posted on the ASCEND 307 web page**
  - This session will be recorded.
  - Handouts and the Slides are available on the ASCEND 307 webpage
- **Closed Captioning:** needs to be set up individually by clicking on the “closed caption” on the bottom row of icons on your session screen
- **Links posted in Chat:** throughout the session, pertinent links will be posted in the Chat
- **Q&A:** To ask questions, please use the Q & A box

WDE SPED

ASCEND 307

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Essential Readiness Skills Webinar Series

Focus on Critical Thinking Skills Necessary for Success

Please watch a welcome video by Superintendent Degenfelder

ESSENTIAL READINESS - EMPLOYABILITY SKILLS

WHAT?

Skills employers consistently rank as essential for new hires.

- Applied Knowledge
  - Problem Solving
  - Making Decisions
- Effective Relationships
  - Team Member
  - Flexibility
- Workplace Skills
  - Manage Time
  - Communicate

WHY?

Superintendent Degenfelder 2025 Priority

- Pursuing Academic Excellence
  - Expand career & technical education opportunities

WY Community College Commission

- Social Capital Skills

Office of Career, Technical & Adult Education

- Employability skills

WHO needs them WHEN?

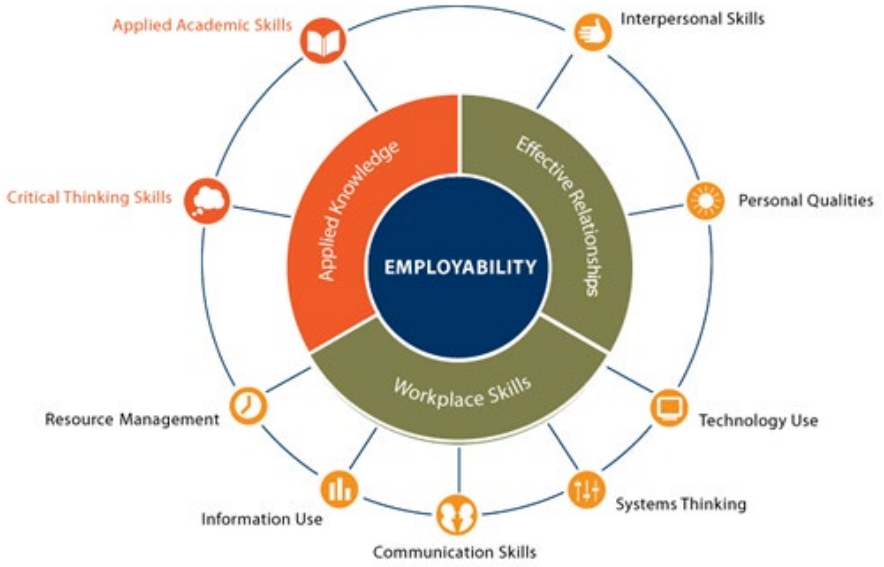
All students with and without disabilities need to function in society.

- Executive Functioning skills form the core foundation of employability skills
  - Pre-K-12
    - Develop executive function skills
  - Transition
    - Employability skills

EMPLOYABILITY SKILLS FRAMEWORK FOR WYOMING-READY WORKFORCE

Applied Knowledge:

- Applied academic skills: reading, writing, mathematics
- Critical thinking skills: problem solving, make decisions



Effective Relationships:

- Interpersonal skills: teamwork, positive contributions
- Personal qualities: personal responsibility, professionalism, flexibility

Workplace Skills:

- Resource management: managing time & other resources
- Information use: using a variety of information to perform tasks
- Communication skills: communicating effectively with others to perform tasks
- Systems thinking: contributes to workplace teamwork
- Technology use: applying technology appropriately to perform tasks

FOCUS ON CRITICAL THINKING SKILLS NECESSARY FOR SUCCESS

Sheila Lovato serves as a Senior Technical Assistance Consultant at the American Institutes for Research (AIR) within the Human Services Division, Learning Supports Program Area. In this role, Sheila provides professional learning, coaching, and consultation focused on data use and evidence-based practices to improve student outcomes. Her expertise centers on multi-tiered system of supports (MTSS) and strategies for supporting students with disabilities. Sheila brings extensive experience in delivering training and technical assistance at all levels of education; schools, districts, and states. Her background includes teaching from preschool through college and serving in roles such as interventionist, academic counselor, and state agency staff member. As a unit manager for special education at a state agency, she led statewide professional development initiatives for local agencies serving students with disabilities. Currently, Sheila contributes to the development of WDE's Essential Skills micro-credential courses as part of her work at AIR. She holds a B.S. in Elementary Education from Florida State University and an M.Ed. in Special Education Interdisciplinary Studies from Montana State University–Billings.

WHAT ARE CRITICAL THINKING SKILLS?


5 TIPS
TO IMPROVE
YOUR
CRITICAL
THINKING
TEDEd

FIVE TIPS

FORMULATE	GATHER	APPLY	CONSIDER	EXPLORE
Formulate your question	Gather your information	Apply the information	Consider the implications	Explore other points of view

WHAT CRITICAL THINKING SKILLS DO YOU BELIEVE ARE NECESSARY FOR POST-SCHOOL EMPLOYMENT AND SUCCESS?

Reflect in the Q&A

WHY ARE THESE SOMETIMES REFERRED TO AS SOFT SKILLS?

- **Origin:** The term began in the 1960s (U.S. military) to distinguish people-focused skills from technical or “hard” skills.
- **Human-Centered:** Soft skills involve communication, collaboration, adaptability, and empathy—skills rooted in human interaction rather than technical tasks.
- **Harder to Measure:** They’re called “soft” because they are intangible and difficult to quantify, unlike hard skills that can be tested or certified.
- **Misleading Name:** Despite the label, soft skills are often the hardest to teach and the most critical for success in school, work, and life.

Critical thinking can also be considered a foundational or core skill.

CRITICAL THINKING IN THE WORKPLACE

- Recognize issues and evaluate information objectively.
- Use facts and logic to choose options and create practical solutions.
- Break tasks into steps and manage time and resources effectively.
- Adjust strategies when conditions change and work with others to refine ideas.
- Demonstrate resilience and continuous improvement.

WHY IT MATTERS

Better Problem-Solving

- Employees can identify root causes and develop effective, long-term solutions instead of quick fixes.

Stronger Decision-Making

- Critical thinking ensures choices are based on evidence and analysis, reducing costly mistakes.

Adaptability and Innovation

- Workers can adjust to changing conditions and create new ideas that improve processes and outcomes.

CRITICAL THINKING IN THE CLASSROOM

- Ask thoughtful questions to understand concepts deeply.
- Compare and contrast ideas or solutions before choosing one.
- Use evidence to support answers rather than guessing.
- Break down complex tasks into manageable steps.
- Reflect on mistakes and identify ways to improve.
- Consider multiple perspectives during discussions or group work.
- Apply learned concepts to solve real-world problems.

TO WHAT EXTENT ARE YOU INTENTIONALLY DEVELOPING STUDENTS' CRITICAL THINKING SKILLS, NECESSARY FOR SCHOOL AND POST-SCHOOL SUCCESS?

WHAT QUESTIONS DO YOU HAVE ABOUT CRITICAL THINKING?

Reflect in the Q&A

HOW CAN EDUCATORS DEVELOP STUDENTS' CRITICAL THINKING SKILLS?

EXECUTIVE FUNCTIONING AND CRITICAL THINKING

EXECUTIVE FUNCTION SKILL	BARRIER FOR STUDENTS
Planning and Organization	Students with poor planning skills may feel overwhelmed and unable to start.
Working Memory	Limited working memory makes it hard to connect concepts or follow multi-step reasoning.
Cognitive Flexibility	Students with rigid thinking struggle to shift approaches or accept alternative solutions.
Self-Monitoring	Students may not notice mistakes or reflect on whether their solution makes sense.
Impulse Control	Students who act impulsively may choose the first idea without evaluating evidence.

COGNITIVE AND METACOGNITIVE STRATEGIES

- Cognitive Strategies focus on how students process information and apply thinking skills.
- Metacognitive Strategies help students become aware of their own thought processes and manage their learning independently.

COGNITIVE AND METACOGNITIVE STRATEGIES FOR TEACHING CRITICAL SKILLS

Analysis

- Collect and analyze data to identify solutions and/or make informed decisions.

Investigation

- Identify and define authentic problems and significant questions for investigation.

Exploration

- Use multiple processes and diverse perspectives to explore alternative solutions.

Interaction

- Test and refine solutions to improve final design and outcomes.

ANALYSIS

Strategies:

- **Compare & Contrast:** Use Venn diagrams or T-charts to analyze similarities/differences.
- **Data Interpretation:** Teach students to read charts, graphs, and summarize findings.
- **Think-Alouds:** Model how to break down information logically.
- **Error Analysis:** Review mistakes and discuss why they occurred.

Classroom Example:

Analyze survey results from classmates to decide the most popular project topic.

Workplace Example:

Review customer feedback data to identify service improvements.

What strategies have you used to teach analysis?

THINK-ALOUD IN ACTION

IRIS Center, 2024

EXPLORATION

Strategies:

- **Brainstorming:** Encourage generating multiple ideas before choosing one.
- **Role-Playing:** Explore different viewpoints in a scenario.
- **Graphic Organizers:** Map out possible solutions visually.
- **What-If Scenarios:** Ask “What if we tried this?” to expand thinking.

Classroom Example:
Brainstorm ways to reduce classroom waste and discuss pros/cons.

Workplace Example:
Explore alternative layouts for a stockroom to improve efficiency.

What strategies have you used to teach exploration?

BRAINSTORMING A *WHAT IF* SCENARIO

Instructions:

- Type your ideas in the Q & A. Defer judgment: quantity over quality
- Build on others ideas. Encourage wild ideas. Make it fast!

Practice:

- What if money didn't exist.
- How would people trade or get what they wanted?

What if you are introducing exploration as part of critical thinking, but students struggle to generate diverse ideas? They stick to the first solution or copy each other.

Investigation

Strategies:

- **Questioning Techniques:** Teach open-ended and probing questions.
- **KWL Charts (Know, Want to Know, Learned):** Guide inquiry-based learning.
- **Research Skills:** Show how to gather credible sources.
- **Hypothesis Building:** Predict outcomes before testing.

Classroom Example:
Students develop questions for a science experiment on plant growth.

Workplace Example:
Identify root causes of recurring technical issues before proposing fixes.

What strategies have you used to teach investigation?

KWL CHART EXAMPLE

Space Exploration

K: WHAT I KNOW	W: WHAT I WANT TO KNOW	L: WHAT I LEARNED
Astronauts travel to space in rockets.	How do astronauts eat and sleep in space?	They use specially packaged food and sleep in sleeping bags attached to walls.
The moon has no atmosphere.	What is the purpose of the International Space Station?	It's a research lab where scientists study space and Earth from orbit.
Space is very cold.	How do astronauts stay safe from radiation?	They use shielding in spacecraft and limit time outside during spacewalks.

EXAMPLE: PROBING QUESTIONS

INTERACTION

Strategies:

- **Peer Review:** Share work and get feedback for improvement.
- **Trial & Error:** Encourage testing ideas and revising based on results.
- **Reflection Journals:** Document what worked and what didn't.
- **Collaborative Problem-Solving:** Work in teams to refine solutions.

Classroom Example:
Students test different bridge designs in a STEM project and improve based on results.

Workplace Example:
Pilot a new customer service script and adjust based on feedback.

What strategies have you used to teach interaction?

FORMING COLLABORATIVE TEAMS

STEP	DESCRIPTION
1. Define the Problem	Present the challenge: ex. design a garden for students and the community. Share constraints (budget, space, time).
2. Form Groups	Create teams of 4–5 with assigned roles (facilitator, recorder, researcher, presenter).
3. Provide Resources	Give planning templates, research access, collaboration guidelines, and examples of successful projects.
5. Facilitate & Monitor	Guide group work, resolve conflicts, and encourage equal participation.
6. Reflect & Share	After presentations, discuss collaboration successes and areas for improvement.

IMPACT ON POST-SCHOOL SUCCESS

- Strengthens problem-solving and decision-making.
- Improves adaptability and resource management.
- Fosters teamwork and communication.
- Prepares students for real-world challenges and career growth.

QUESTIONS AND CLOSING THOUGHTS

RESOURCES: COGNITIVE AND METACOGNITIVE STRATEGIES

- PROGRESS Center instructional practice brief on Cognitive and Metacognitive Strategies
- PROGRESS Center self-paced course on Teaching Cognitive and Metacognitive Strategies
- CEEDAR Center practice-based learning module on Cognitive and Metacognitive Strategies
- IRIS Center self-paced modules on Executive Functions (two parts)

LEARN MORE

- Social Capital Skills: communitycolleges.wy.edu/adult-education-standards-success
- Office of Career, Technical, and Adult Education: https://cte.ed.gov/
- Employability Skills Framework; Employability skills Planning Checklist both pdf and docx https://cte.ed.gov/initiatives/employability-skills-framework
- Integrating Employability Skills: A Framework for All Educators: https://air.org/resource/guidetoolkit/integrating-employability-skills-framework-all-educators
- ASCEND 307 web page: https://edu.wyoming.gov/parents/special-education/ascend-307/
- Employability skills framework instruction planning tool https://lincs.ed.gov/sites/default/files/employability-skills-framework-instruction-planning-tool.pdf
- Understanding the IDEA and FAPE in relation to functional skills https://www.nj.gov/education/specialed/policy/documents/IDEA_FAPE_FunctionalSkillsGuide.pdf
- Employability skills handout air.org/resource/guidetoolkit/integrating-employability-skills-framework-all-educators

LEARN MORE

- Belonging handout; Cognitive and Metacognitive Strategies; Teaching Social Behaviors; Instructional Technology Promotingprogress.org/home
- Self-Management tip sheet https://intensiveintervention.org/
- PK-5k SEL Competencies with Assessment; 1-3 SEL Competencies with Assessment; 4-5 SEL Competencies with Assessment; 6-8 SEL Competencies with Assessment; 9-10 SEL Competencies with Assessment; 11-Adult SEL Competencies with Assessment https://dpi.wi.gov/sspw/mental-health/social-emotional-learning/competencies
- Integrated Supports Star - overview; Integrated Supports Star - tip sheet; Respite Supports Star; Safety and Security Supports Star; Support and Decision Making Supports Star; Advocacy and Engagement Supports Star; Social and Spirituality Supports Star; Healthy Living Supports Star; Community Living Supports Star; Daily Life and Employment Supports Star https://www.lifecoursetools.com/lifecourse-library/integrated-supports-star/
- Employability Skills Workbook https://www.air.org/resource/guidetoolkit/integrating-employability-skills-framework-all-educators
- Employability Skills Framework Assessment Selection Tool https://lincs.ed.gov/sites/default/files/employability-skills-framework-assessment-selection.pdf
- Employability Skills Framework Interviewing for Employability Skills https://lincs.ed.gov/sites/default/files/employability-skills-framework-interview-guide.pdf
- Matrix of comparisons of employability skills assessments https://lincs.ed.gov/sites/default/files/employability-skills-framework-source-matrix.pdf
- Social and Emotional Competencies and Career and Technical Education Employability Standards Crosswalk https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/FINAL_SEL_CTE_Crosswalk_1.pdf
- Wisconsin's Employability Skills Certificate Implementation Guide https://dpi.wi.gov/sites/default/files/imce/cte/pdf/esimpleguide.pdf

Please Complete the Evaluation

https://winweb.ddehome.com/Evaluation.aspx?WorkshopID=1934

ASCEND 307 WEBINAR SERIES - WHAT'S NEXT

Employability Skills Webinar Series are (generally):
Second Wednesday of the month, 4-5pm

- February 11: Technology Use
- March 11: Resource Management and Information Use
- April 8: Systems Thinking
- May 6 (NOTE: first week in May): Wrap up, review/circle back as applicable

Please see the ASCEND 307 website to register.

FOR MORE INFORMATION

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ASCEND 307 is a multi-year initiative developed through a federal grant awarded to the Wyoming Department of Education. The overarching goal of the Wyoming State Personnel Development Grant is to improve outcomes for students with disabilities by enhancing personnel preparation and professional development in education and transition services.