

# Why and How Electronic Job Coaches Improve Employment for People with Disabilities

Research by:

**CREATEABILITY**



Center for Knowledge Translation on Employment Research

# Acknowledgements

The production of this webinar was funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), Grant #90DPEM0004. The content was funded by NIDILRR through grants funded to CreateAbility Concepts, Inc. (#90BI0029, and #90BISB0009).

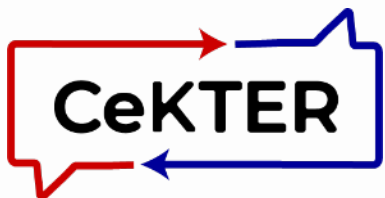
NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policy of NIDILRR, ACL, or HHS and you should not assume endorsement by the Federal Government.



Center for Knowledge Translation on Employment Research

# What We Will Cover Today:

1. Policies aimed to improve the competitive integrated employment of people with disabilities can't be realized without effective and efficient job supports.
2. People with intellectual disabilities (ID) thrive and prefer electronic job coaches to outdated job supports like laminated binders.
3. Job coaches and supervisors may not have the time or skills for individualized, job specific prompts and clear, accurate task analysis.
4. An electronic job coach solution was developed and tested that:
  - simplifies the process of creating step-by-step working assignments
  - allows providers to customize the level of detail and type of interaction offered
5. Research showed that this electronic tool:
  - reduced the time spent by a job coach with each person with ID
  - increased enjoyment and engagement at work for people with ID



# The Story Behind Developing an Electronic Job Coach Application

- Millions of individuals with mild to moderate intellectual disabilities (ID) remain unemployed despite federal and state policies that encourage competitive employment.



# Employment Challenges for People with ID

- To succeed in competitive employment, workers with ID require help with executive functioning skills such as:
  - memory
  - task sequence and planning
  - time management



# The Burden on the Job Coach

- Today's jobs are more complex.
- Job coaches may not have the time and/or the skills required to make clear accurate instructional prompts for multiple workers with ID in different settings.
- Job coaches need tools that can help them effectively and efficiently build, record and adjust prompts and instructions as changes occur in real time.





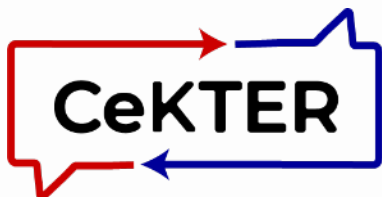
# Electronic Job Coach Apps are a Better Solution

- Help workers confidently fade from human supports
- Be worn on the body leaving hands free
- Be synchronized with changes in the environment to advance to the next instructional prompt.
- Get the level of instruction needed relevant to abilities, mood, or changing work environment



# The Quest to Build an Improved Electronic Job Coach App

- CreateAbility Concepts, Inc. received federal funding from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) through two small business innovation grants to conduct research in this area
- Research focus:
  - Get feedback from key stakeholders on essential features of an electronic job coach app
  - Design, build and test new app

The logo for CreateAbility, featuring the word "CREATE" in orange and "ABILITY" in black, both in a bold, sans-serif font.The logo for the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). It features a red circular icon with a white cross-like shape inside, above the text "NIDILRR" in blue, and the full name of the institute in smaller blue text below.

Center for Knowledge Translation on Employment Research

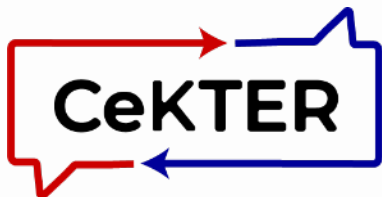


# Research to Determine the Ideal Electronic Job Coach

Data was collected to determine the requirements of an ideal system that would help job coaches better instruct, coach, track progress and manage teams of employees with ID.

Data was collected from:

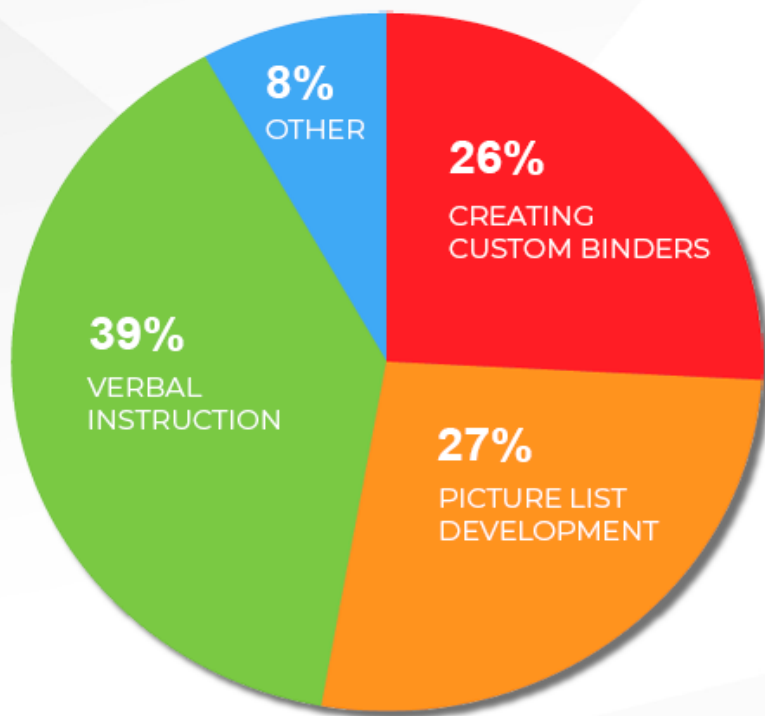
- Individuals with intellectual disabilities
- Job coaches/providers
- Employers



Center for Knowledge Translation on Employment Research

# The Pilot Study

## JOB COACH RESPONSIBILITIES PER PERSON SERVED WITHOUT ASSISTIVE TECHNOLOGY



### **39% VERBAL INSTRUCTION:**

Providing in-person training on the job in work environment.

### **26% CREATING CUSTOM BINDERS:**

Developing binder with tasks and simplified SOP's for employees.

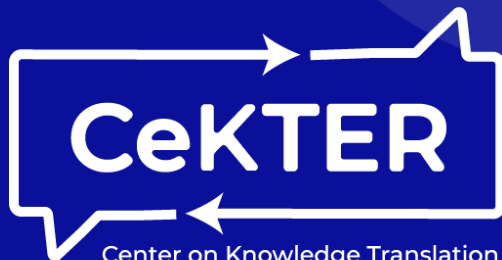
### **27% DEVELOPING LAMINATED PICTURE LISTS:**

Searching stock and/or taking relevant task pictures and lamination process.

### **8% OTHER TASKS**

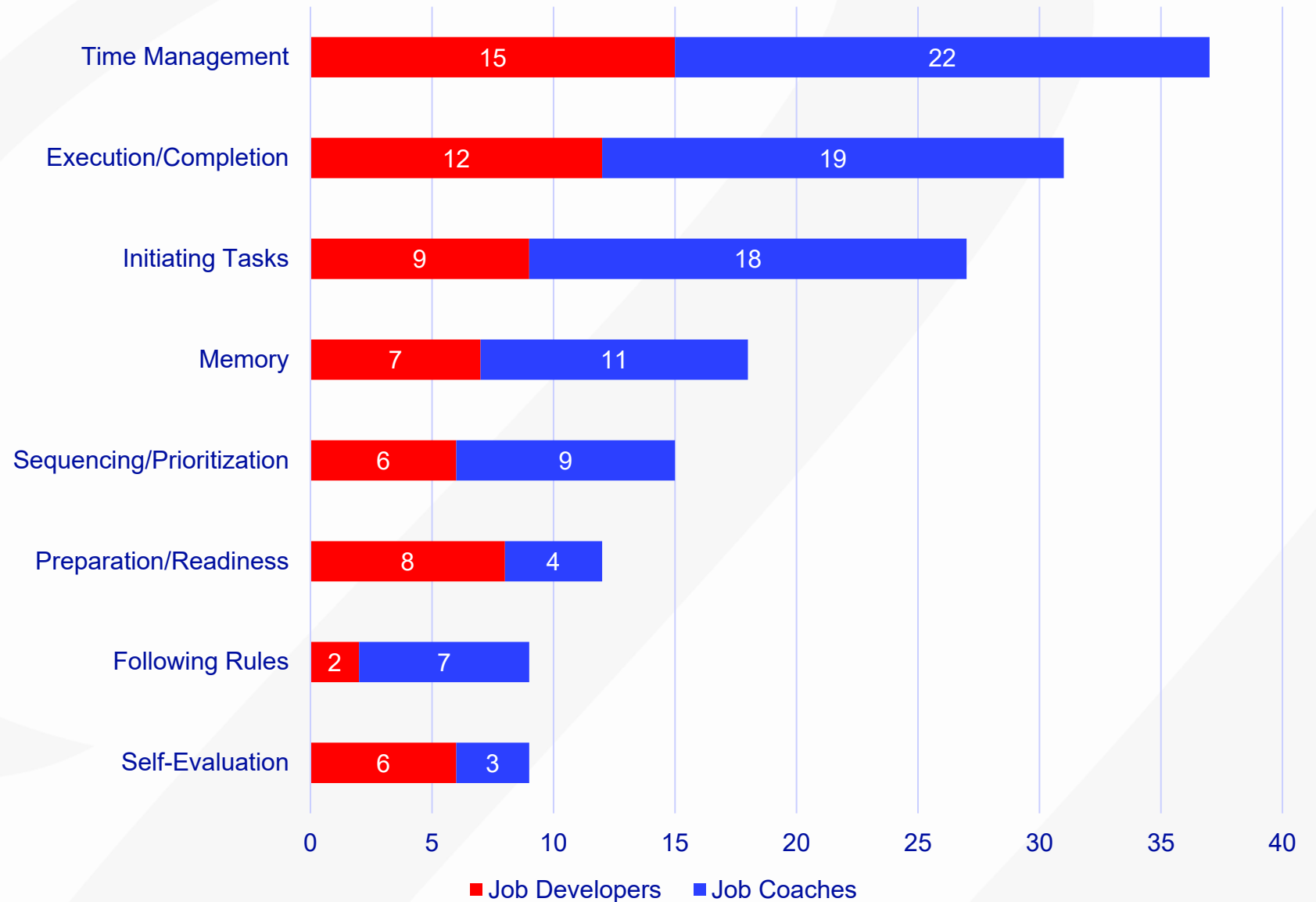


# Executive Functioning Challenges Experienced by Individuals with ID at Work



Center on Knowledge Translation  
for Employment Research

## Staff Concerns Regarding Tasks



# Top Features and Functions of an Electronic Coach

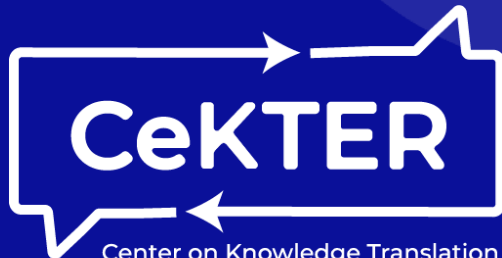
(N=42 Supervisors & Coaches)



Ranked Priority	Top Features and Functions
1	Track productivity
2	Detect and re-direct off-track employees
3	Build consensus with staff
4	Generate reports and documentation
5	Find similar example to leverage
6	Modify slightly and re-use
7	Re-order instruction sequence
8	Change prompt delivery method

# Ranked Priority of Top Features and Functions, by Workers with ID

(N=33 workers w/ID)



Center on Knowledge Translation  
for Employment Research

Table 2: Ranked priority of Top Features and Functions (N = 33 workers with ID)

Ranked Priority	Top Features and Functions
1	Help me remember what to do next.
2	Tell <i>[e.g., remind]</i> me where to go next.
3	Tell my boss I'm doing good.
4	Tell me if my boss is looking for me.
5	Tell me before I run out of _____. <i>[e.g., of supplies / materials]</i>
6	Count how many _____ I did. <i>[e.g., units completed]</i>
7	Be quiet sometimes. <i>[e.g., prompt when needed]</i>
8	Help me know if I'm behind. <i>[e.g., too slow / late]</i>

# The Research Identified a Problem

*Coaches and supervisors need tools that can help them **effectively and efficiently build, record, and adjust prompts and instructions for each individual person as changes occur in real-time.***

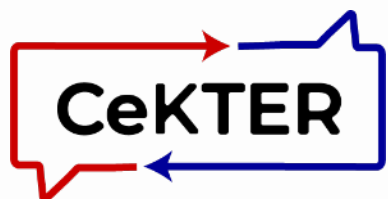


**CREATE**ABILITY



# Making A Better Tool

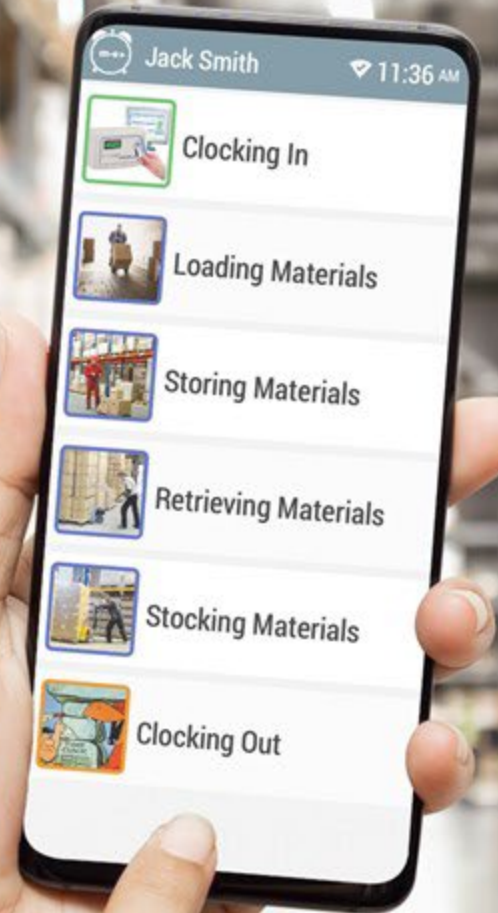
- Held focus groups with users (e.g., employer, job coach, employee with ID.)
- Refined the app - expanded features and functions.
- Conducted in-depth lab and workplace evaluations to assess the impact of the app with both supervisors and their employees with ID.



# The Solution: WhenWear Advisor

## A cloud-based, interactive electronic job coaching app for providers

- Simplifies task analysis by efficiently converting work assignments into the essential details.
- Wirelessly transfers appropriate instructions to the targeted worker's electronic coach.





# “WhenWear Advisor” Makes Task Creation Easy

- Task library with 200+ pre-programmed generic common tasks
- A private repository for tasks that are proprietary to a single agency, provider, or corporation (i.e., McDonald’s, Walmart, Panera Bread, etc.)
- A platform for creating custom tasks for any tasks not found in the public or private repository. Providers can “create a new task”, name it, and record instructions.



# Customizable Based Upon Employee's Need

## WhenWear Advisor can help employees:

- Work more confidently without immediate supervision
- Stay on task with task alerts
- By sending customized task instructions relevant to the work environment/job requirements
- By offering instruction in the format that works best for them



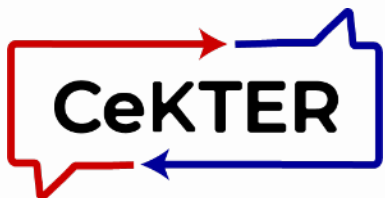
Video  
demonstration



Talking  
Pictures



Audio  
Only Sequences



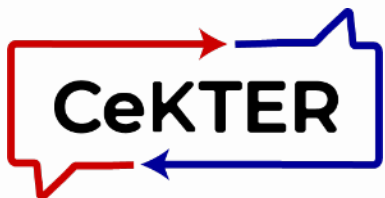
# Now Let's Watch WhenWear Advisor in Action

Presented by Steve Sutter,  
President and CEO  
at CreateAbility Concepts, Inc.



# WhenWear Advisor Empowers Providers

- **Tracking productivity in real-time** - enabling job coaches to track the employee's task completion remotely, via a web-based dashboard.
- **Automatically promoting fading techniques** - to reduce reliance on supports.

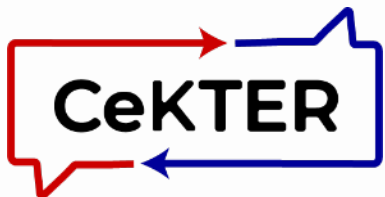


Center for Knowledge Translation on Employment Research



# WhenWear Advisor Simplifies Job Placement for Providers

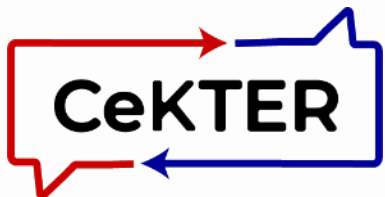
- Employers appreciated that employees require less supervision and made fewer errors
- Employees like the increased independence and flexibility
- Job coaches fade faster (due to the extensive library of examples, task analysis, and remote monitoring) and are able to gain back time lost to outdated support systems



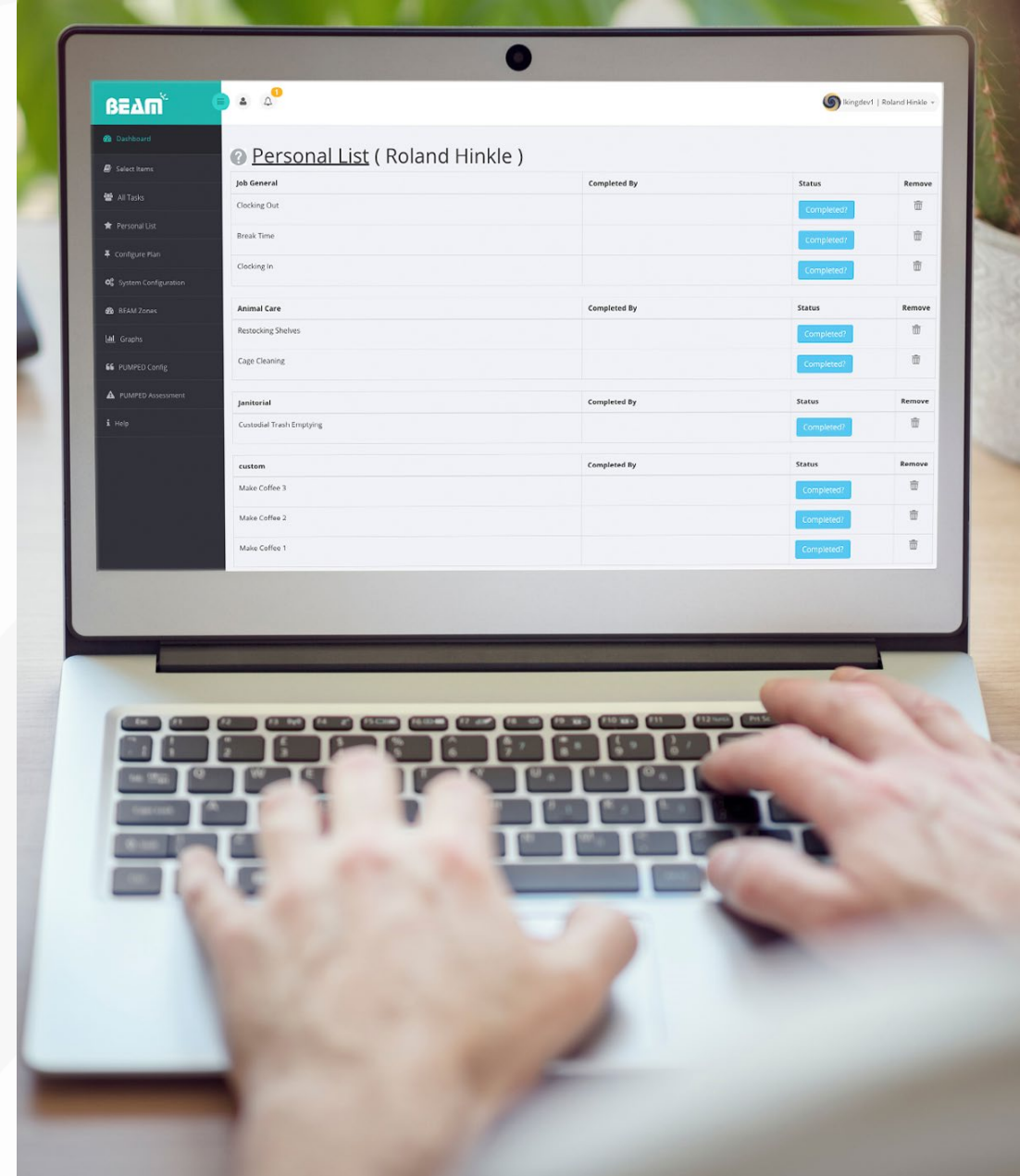
# WhenWear Advisor: Benefits to the Job Coach

Coaches reduced 32-hours of their time per employee. The reductions in time spent:

- Developing & maintaining binders/picture lists
- Traveling to employer locations
- Resolving employee memory & sequencing problems
- Additional support tasks to verify that the work is performed correctly



Center for Knowledge Translation on Employment Research



# Benefits of WhenWear Advisor for Workers with ID

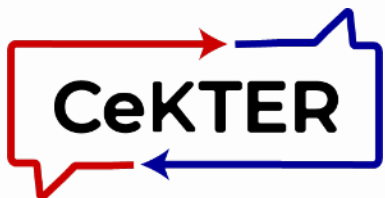
- 82% preferred an electronic form of job coaching
- 92% reported increased enjoyment and engagement at work when using the app
- Those that preferred the app used it 87% of the time
- Workers with ID had increased feelings of independence and less anxiety about their work because they had their coach (app) with them all the time



**CREATE ABILITY**

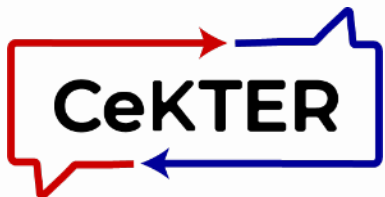
# Conclusion

- ✓ Replacing antiquated employment supports with technology
  - Streamlines processes
  - Saves job coaches and developers time and energy
- ✓ Electronic applications
  - Assist workers with ID with time and task management
  - Are an effective and efficient approach to achieving policy directives for improved rates of competitive integrated employment



# Conclusion (cont.)

- ✓ People with ID thrive with enabling technology as it fosters executive functioning skills such as:
  - Memory
  - Task sequence
  - Consistency
  - Task analysis
- ✓ Electronic Job Coaches like WhenWear Advisor add the benefit of supporting the employer, supervisor & job coach with tools that help them be more effective in their jobs supporting workers with ID.



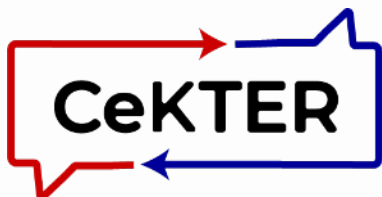


WhenWear Advisor is now commercially available as **MeMinder**, as part of the Employment Suite from CreateAbility.



*For more information visit:*

<https://www.createabilityinc.com/the-employment-suite>



Center for Knowledge Translation on Employment Research



# Questions?



# Thank you!



UMass Chan  
MEDICAL SCHOOL

