Alternate Academic Achievement Standards to Support Readiness for Postsecondary Opportunities: Expanding Opportunities for Students with Significant Intellectual Disability

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Purpose

A new federal education requirement for statewide alternate assessments calls for alternate academic achievement standards to be aligned so that students with significant cognitive disabilities who meet the standards are on track to pursue postsecondary education and competitive integrated employment opportunities.

This study outlines the approach taken to produce evidence that a student who meets the alternate academic achievement standards in the Dynamic Learning Maps® (DLM®) Alternate Assessment System is on track to pursue postsecondary opportunities.

Background

The DLM Alternate Assessment System is designed to assess students with significant cognitive disabilities in grades 3-8 and high school on grade-level academic content in English language arts (ELA), mathematics, and science. More than 20 states administer the DLM assessment to the approximately 1% of students who cannot access general education assessments, even with accommodations.

There are four performance levels that describe student achievement on DLM assessments: Emerging, Approaching the Target, At Target, and Advanced. Students have met grade-level standards if they achieve "At Target" or higher. In each grade and subject, students who achieve At Target typically demonstrate certain academic knowledge, skills, and understandings

Example – Grade 5 English language arts "At Target" Descriptors

A student who achieves at the **at target** performance level typically can identify text elements, demonstrate an understanding of language, and identify text structure when reading literature and informational text.

The student identifies text elements by
- comparing different characters
- finding similarities and differences between key details
- identifying reasons that support points made by the author
- determining the narrator's point of view
- identifying the theme

The student demonstrates an understanding of language by
- using sentence context to identify a missing word
- using context clues to determine meaning
- understanding that words have similar meanings
- identifying domain-specific words

The student identifies text structure by
- identifying elements of the story that change from the beginning to the end
- determining if the text tells about events, gives directions, or provides information
- using text features to locate information
- comparing and contrasting details in two texts

When writing, the student
- introduces an informational topic
- conveys information about the topic
- provides facts or details related to the topic

Methodology

Data were collected from two panel activities and combined with evidence of the content structures in the DLM system.
- Panel 1, experts in transition and postsecondary services, identified opportunities in postsecondary education and competitive integrated employment for students with significant cognitive disabilities. Then they identified the academic skills needed to fulfill the responsibilities required by those opportunities.

Opportunity: Veterinary Assistant	
Responsibilities	**Knowledge, Skills, and Understandings**
Clean room, cages, and equipment	Know how to determine if [cages, equipment] is clean
Perform clerical tasks	Record amount of food eaten
Feed animals and monitor if they are eating	• Record data in an existing chart (e.g. numerical data)*
Bathe pets	Know which food goes for which animal
	• Classify items by common attributes*
	• Identify when animals needs food and shelter*
	Temperature of water
	• Read scale on a thermometer to measure temperature*
	Know how to wet, soap, rinse, and dry
	• Determine the appropriate cycle for cleaning various animals*

Note. Asterisks indicate academic knowledge, skills, and understandings.

- The second panel of general and special educators rated academic skills against a description of the skills that a student achieving "At Target" can typically demonstrate in each grade. Panelists determined the lowest grade a student could consistently demonstrate a given skill.

Results

Panel 1 identified 50 academic skills produced for ELA, 41 for mathematics and 53 for science. These were linked to 57 competitive integrated employment opportunities and 7 education opportunities. Even "soft skills" like social skills and self-advocacy have connections to academic content standards.

Panel 2 rated most academic skills as first associated with a student achieving "At Target" in elementary grades (96% of ELA skills, 72% of mathematics skills, and 40% of science skills).

Evidence collected during the design of the DLM assessment system indicates that students who perform "At Target" in early grades can learn more complex applications of these skills in higher grades. Those more complex skills can be used for other postsecondary opportunities. Here is an example for mathematics, where a student achieves At Target starting in grade 4.

Grade	Skill	Use in postsecondary opportunities
4	Add and subtract multidigit numbers without regrouping.	Check inventory, stock items.
7	Apply the properties of addition or multiplication to solve problems.	Calculate perimeter of garden to determine how much fence is needed.
10	Represent and solve real-world problems.	Determine profit on sold merchandise and calculate how much more inventory can be ordered.

Results Continued

Distribution of Skills Across the Lowest Grades in Which a Student Achieving "At Target" Is Likely to Demonstrate the Least Complex Version by Employment and Education Opportunities
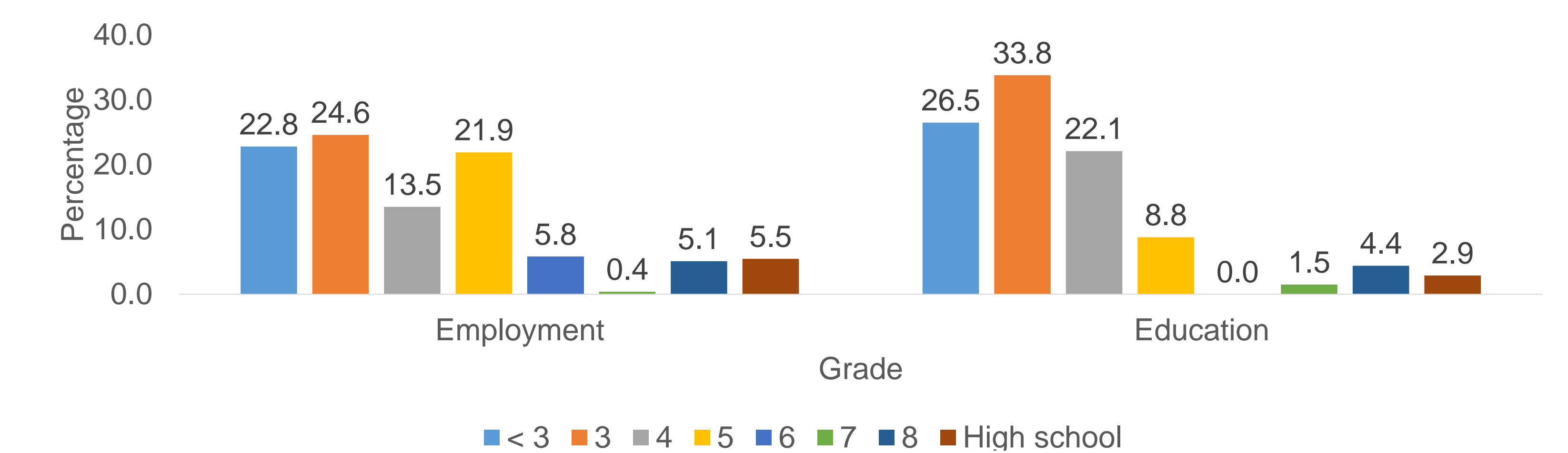
Conclusions

This study provides evidence that a student who achieves "At Target" possesses the academic skills that are necessary to pursue postsecondary education and competitive integrated employment. Since many skills are first associated with early grades, students can develop more complex versions of this skills as they enter higher grades.

When students with significant cognitive disabilities are instructed on academic skills aligned to grade-level academic expectations, they can make academic progress so they leave school ready to pursue postsecondary opportunities.

Implications

- Maintaining high expectations gives students with significant cognitive disabilities a chance to learn academic skills that can help them after high school. Knowing what skills are common for students achieving "At Target" can help keep expectations high. Alternate assessment results can help IEP teams plan for the next year's instructional goals.
- Transition teams should identify the academic skills likely to support the student's postsecondary goals and interests. This process may benefit from collaboration between transition specialists and teachers who understand the academic content standards, so they can design classroom instruction and transition experiences that give students opportunities to use those skills in a variety of contexts.

Further Information

Karvonen, M., Burnes, J. J., Clark, A. K., & Kavitsky, L. (2020). *Aligned academic achievement standards to support pursuit of postsecondary opportunities: Instructionally embedded model* (Technical Report No. 20-02). University of Kansas; Accessible Teaching, Learning, and Assessment Systems. https://tinyurl.com/dlm-pso-ie

Karvonen, M., Kavitsky, E., Burnes, J., & Clark, A. K. (2021). *Supporting pursuit of postsecondary opportunities: Instructionally Embedded Model* (Research Synopsis 21-01). University of Kansas, Accessible Teaching, learning, and Assessment Systems. https://dynamiclearningmaps.org/sites/default/files/documents/publication/Project%20Brief_PSO_021021.pdf