



NATIONAL ALTERNATE ASSESSMENT CENTER

Learner Characteristics Inventory: Describing the Students Taking Alternate Assessments based on Alternate Achievement Standards (AA-AAS)

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April 12th, 2007

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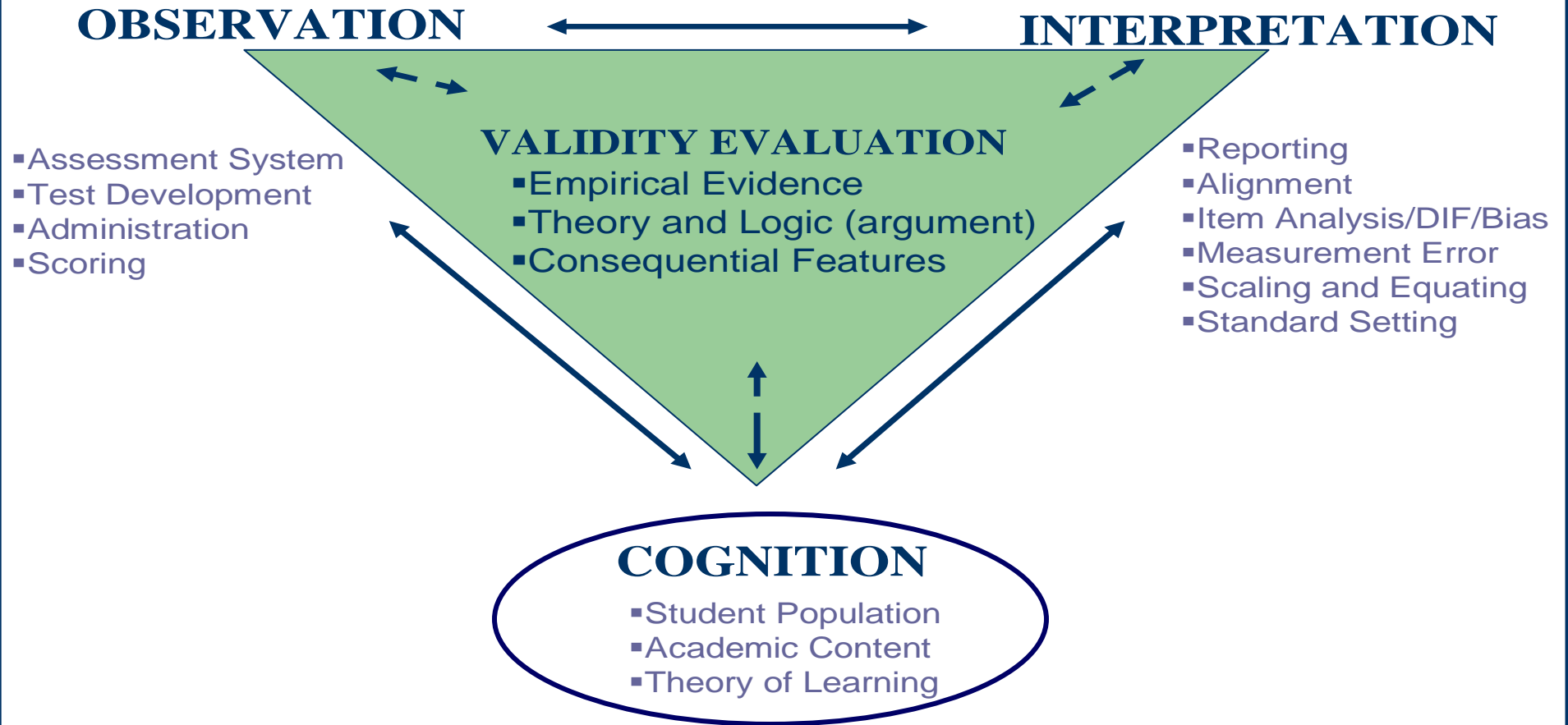
Purpose of the study

- Students completing an alternate assessment on alternate achievement standards (AA-AAS) represent less than 1% of the total student population and come from a variety of disability categories but represent students with the most significant cognitive disabilities.
- Researchers have found that the Individuals with Disabilities Education Act (IDEA) disability label allowing a student to receive special education services (i.e., autism, mental retardation, multiple disabilities) does not adequately describe the learning characteristics of this heterogeneous population (NAAC, 2005)
- The purpose of conducting the current research was to investigate the true learning characteristics of students participating in the AA-AAS through the Learner Characteristics Inventory (LCI) to inform state decisions about the AA-AAS.

Theoretical Framework

- An underlying conceptual model for the work of this Center is the “assessment triangle”, based on the work of the National Research Council’s Committee on the Foundations of Assessment (Pellegrino, Chudowsky, & Glaser, 2001). This triangle explicates the key relationships between models of student cognition, observation of student work, and the inferences we can draw from these observations about what students know.
- For AA-AAS for students with the most significant cognitive disabilities, we suggest that a theory of learning (cognition) of academic content has not been well articulated for this population and therefore is incomplete in the assessment design process. Therefore, the first step in understanding the cognition vertex of this triangle is complete documentation of who the students are who take AA-AAS.

The Assessment Triangle and Validity Evaluation



Marion, S., & Pellegrino, J. (2006). A validity framework for evaluating the technical quality of alternate assessments. *Educational Measurement: Issues and Practice*, 25(4), 47-57.

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Methodology

- 3 partner states chose to participate.
- All inventories were gathered through an online survey using surveymonkey or zoomerang in the three states. One state had the option of paper pencil submission at teacher trainings as well as the online completion of the inventory.
- Teachers were invited to participate through emails from the director of the Assessment and Accountability Office in each of the three states. In one state, teachers were sent emails through district administrators which were then forwarded on to teachers.

Instrumentation

- The LCI was developed by researchers at NAAC in conjunction with experts in the fields of Occupational Therapy, Physical Therapy, Speech/Language Therapy, Deaf-blindness, Reading, Mathematics, and Special Education.
- The survey was then piloted with a small sample of teachers. Teachers were asked to choose a partner respondent and both were to provide an LCI for a single student so interrater agreement could be calculated. Interrater agreement was 84%.
- Changes were made to refine the tool.
- A final version of the LCI was once more piloted with a small sample of teachers (and partner respondents). The interrater agreement was 95%.

Instrumentation

- Learner Characteristics (all on a continuum of skills):
 - Expressive Language
 - Receptive Language
 - Vision
 - Hearing
 - Motor
 - Engagement
 - Health Issues/Attendance
 - Reading
 - Mathematics
 - Use of an Augmentative Communication System (dichotomous variable)

Response Rates

- State 1 was a southern, rural state:
 $1120/1394=80\%$ (from grades 4, 8,
and 12)
- State 2 was a northeast,
urban/suburban state: $201/2800=7\%$
(from grades 3-8, 10)
- State 3 was a western, rural state:
 $219/467=47\%$ (from grades 3-8, 11)

Results

- Across the three states, findings were very similar even with the varied response rates.
- As might be expected, teachers' ratings for individual students ranged across the gamut of performance descriptions within each area assessed by the LCI, but we were able to draw 4 important conclusions.

Results

- 1) Students in these three states who are being identified to take the AA-AAS are for the most part, students for whom the regular assessment, even with accommodations, would probably not be appropriate. For example, only 2 – 4% of the total students in the AA-AAS in these states are able to “read fluently with critical understanding” or “apply computational procedures to solve real-life or routine word problems”. Both of the above skills would be required for the successful completion of grade-level reading and math assessments under NCLB.

Results

- 2) The majority of students were reported to have functional reading and math skills. For example, over 66% of the students in our survey from State 1 could at least read basic sight words or simple sentences in print or Braille, and 59% of the students in the AA-AAS from State 1 could, at a minimum, do computational problems with or without a calculator.

Results

- Within each of these three states, there would appear to be a small but significant number of students (approximately 11% or less) in the AA-AAS whose language skills could best be described as pre-symbolic (Bates, 1976). That percentage appears consistent for both expressive and receptive communication. Moreover, these percentages are also consistent with the percentage of students in each state whom teachers report do *not* respond to social interactions.

Results

- Even larger percentages of students in each of the three states have no observable awareness of print or Braille (15%, 25%, and 13% for the three states respectively) and no observable awareness or use of numbers (13%, 22%, and 11% respectively).

Results

- Our findings suggest that while the majority of students in our sample in their respective states' AA-AAS did have functional math and reading skills, there is a smaller percentage of students whose lack of a formalized, symbolic communication system, or whose lack of awareness of the basic building blocks of reading and math (i.e., print and numbers) may create tremendous challenges in building alternate assessments that a) capture meaningful skills that these students have achieved; *and* b) are linked to grade-level content standards.

Limitations

- One of the most significant limitations in this study is the difficulty in describing communication levels of students in a way in which all communication experts would agree.
- A second limitation is that the LCI is our own instrument, but no other measures existed that would succinctly capture the essential dimensions in which we needed to describe the population of students potentially eligible for the AA-AAS.
- The third limitation is the varied methodology and low response rate for state 2.

Implications for Practitioners

- 1) For students at a pre-symbolic level, then, teachers must teach the development of symbolic communication *through* the grade-level content.
- 2) Development of multiple achievement standards.

References

- Bates, E. (1976). *Language in context: Studies in the acquisition of pragmatics*. New York: Academic Press.
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- National Alternate Assessment Center (NAAC) (2005). *Access and alignment to grade level content for students with significant cognitive disabilities*. Pre-session conducted at the meeting of the Chief Council for State School Officers, San Antonio, Texas.
- Pellegrino, J, Chudowsky, N., & Glaser, R. (Eds.) (2001). *Knowing what students know: The science and design of educational assessment*. Washington, DC: Committee on the Foundations of Assessment, National Academy Press.