

Measuring Child Outcomes for Children Birth through Age Five with Disabilities

Jean R. Ubbelohde

University of Nebraska-Omaha

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**Abstract**

If early intervention is going to be held accountable to its stakeholders then appropriate measurement tools and methods are essential. The Office of Special Education Programs requires states to measure and report outcomes for children with disabilities. The large majority of the states use multiple sources of information to measure outcomes. Nebraska's system of accountability utilizes a single tool, Teaching Strategies GOLD. While there is solid research behind Teaching Strategies GOLD, this research lacks the inclusion of children with disabilities. This research brief will review the research and best assessment practices in early intervention as well as the implications for the Metropolitan Omaha Educational Consortium (MOEC).

### **Research Question**

Is the use of a single tool to assess children birth to age five with disabilities a valid and reliable method to measure child outcomes?

### **Introduction**

Accountability in K-12 education has been in the forefront since the enactment of No Child Left Behind (NCLB) in 2001. Early childhood intervention, or special education services for infants, toddlers and preschoolers, was immune to the accountability requirements when NCLB was enacted. As states worked to design and implement accountability systems for school age children, early childhood special education had yet to realize their time was coming.

Historically, accountability within Individuals with Disabilities Education Act (IDEA) was limited to monitoring how states spent their funds and meeting compliance requirements in serving children with disabilities. The focus has since shifted to one of responsibility for performance and results for children with disabilities. The reauthorization of IDEA stated that the primary focus of monitoring activities should be on improving educational results and functional outcomes and ensuring that all states meet program requirements for children with disabilities (IDEA, 2004).

As a result of an internal government review, the Office of Special Education Programs (OSEP) had yet to provide evidence of effectiveness of early childhood programs (OMB, n.d.). States now faced a new era of accountability for young children with disabilities. Under IDEA, federal special education funds are distributed to states to offset part of the costs of the education needs of children

with disabilities. Part B, section 619, of IDEA is specifically for children age 3-21, while Part C authorizes funds for infants and toddlers (birth- age 3). In 2005, OSEP required that states receiving IDEA Part C and Part B (section 619) funds report outcome data annually on the progress of children receiving services for at least six months of service (Greenwood, Walker, Hornbeck, Hebbeler, & Spiker, 2007).

OSEP's program of accountability required states to report data on three functional outcomes: positive social skills, knowledge and skills, and appropriate behavior to meet needs. Typically in early childhood, progress is reported across developmental domains (e.g., communication, social, cognition, and motor) and each of the three OSEP required outcomes encompass skills from these developmental domains. Beginning in February 2007, states were required to report data on children, birth through age 5, upon entry into special education services. In February 2008, and annually thereafter, states had an additional requirement of reporting data on children upon entry and exit from special education services.

OSEP required that states report data from the three functional outcomes; however, each state designed an individual accountability plan. Individual accountability plans are sensitive to state specific considerations and constraints (Greenwood et al. 2007).

Nebraska's response to the OSEP requirements is titled *Results Matter* (Nebraska Department of Education n.d.), which includes the tools to report child outcomes. State targets were established for each of the three functional outcomes. Initially, each district was allowed to choose between three published assessment tools (Assessment, Evaluation, and Programming System for Infants and Young

Children, Creative Curriculum Developmental Continuum, High Scope Child Outcomes Record). Each tool was a curriculum based measure and included a companion online reporting system. Each publisher provided a crosswalk to the three OSEP required functional outcomes. After four years of districts using different tools to assess and report functional outcomes, Nebraska moved to a single tool. Starting with the 2012-13 school year, each Nebraska school district is required to use Teaching Strategies GOLD, which is the next generation of Creative Curriculum Developmental Continuum.

In Iowa, districts use the Child Outcome Summary Process (COS) for both children birth through age 3 (Part C) and age 3 through 5 (Part B). The COS is not an assessment instrument. Through the use of multiple sources of evidence, the COS process permits educational teams to determine the outcome status of individual children (Greenwood et al, 2007).

### **Summary of Findings**

Assessment plays an important role in early childhood special education; most commonly, it determines eligibility for services. Additionally, assessment is used for program planning and monitoring (formative) progress, and for program (summative) evaluation (Neisworth & Bagnato, 2004).

In a joint statement from the National Association for Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE), indicators of effective assessment practices are established. These key recommendations of effective assessment practices include two items. First, make ethical, appropriate, valid, and reliable

assessment a central part of all early childhood programs. Secondly, assess young children's strengths, progress, and needs by the use of developmentally appropriate methods (NAEYC & NAECS/SDE, 2003).

Another professional organization, the Division of Early Childhood (DEC), has published a set of recommended practices in assessment. These recommended practices reflect eight professional standards that serve as a basis for selecting tools for assessment and include the following: acceptability, authenticity, collaboration, convergence, equity, sensitivity, congruence and utility (Neisworth & Bagnato, 2004). The eight standards are based on two fundamentals: assessment must be developmentally appropriate and it must be in concert with parent participation (Neisworth & Bagnato, 2004).

The value of authentic assessment has emerged over the past 25 years because of the need to make assessments more developmentally appropriate and functional. This has led to a professional sanctioning of observation-based assessments (i.e., authentic assessment) over conventional testing (i.e., standardized measures) (Bagnato, 2007; Neisworth & Bagnato, 2004; Neisworth & Bagnato, 2005). As defined by Bagnato and Yeh-Ho (2006), "(a)uthentic assessment refers to the systematic recording of developmental observations over time about the naturally occurring behaviors and functional competencies of young children in daily routines by familiar and knowledgeable caregivers in a child's life" (p.16).

The developmental and authentic assessment approach is intended to identify strengths and areas of concern (Kim & Smith, 2010). Professionals use the information obtained to guide planning and interventions. Carta (2002) suggests

“intervention practice can only be as strong as its measures” (p.2). Ultimately the selection of the assessment tool(s) and how professionals utilize the information is integral to providing high quality programs for young children.

In response to the federal requirements, states were tasked with the development of their accountability system to document the impact of early childhood intervention and the outcomes for young children receiving these services (Rous, McCormick, Gooden, & Townley, 2007). For many states, developing a set of early childhood standards was the first step. States faced many factors in adopting a statewide accountability system. These factors included (a) choose a “stand alone” tool or an already existing tool that is used for another purpose (e.g., verification determinations) (Campbell & Anketell, 2007); (b) permit local districts to choose a set of tools or require the use of one common instrument; (c) consider the use of and reporting of multiple sources of evidence on child performance; (d) how to securely transfer and store data (Conn-Powers, Piper, & Traub, 2010).

One of the recommended practices of assessing young children is the use of multiple sources of information across environments (Sandall, McLean, Hemmeter & Smith, 2005). In response to the challenge of considering multiple sources of information for the purpose of reporting child outcomes the Early Childhood Outcomes (ECO) Center developed the Child Outcomes Summary Process (COS). From 2008 through 2012 the majority of the states (71-73% Part C and 60-61% Part B) adopted the use of the COS process to collect and report data (ECO, 2012a).

Other states mandated one tool statewide or used publisher developed systems to produce reports.

Using the data from the established tools, states reported progress in five categories and set targets for two “summary statements” that combine data across the five categories (Kasprzak et al., 2012). Summary statement one includes data of those who entered significantly below age expectations and the percent that substantially improved their rate of growth by the time they exited the program. Summary statement two includes children who exited the program within age expectations.

### **Conclusions and Implications for MOEC**

#### **Conclusion**

Over the past five years, states have faced challenges regarding maintaining and improving their systems for reporting outcomes. These challenges included staff development and program improvement. Many states conducted training and technical assistance to providers and administrators to ensure they had the skill set to collect data and make decisions on the data. To improve the reliability and validity of the data, school districts must build staff development into new teacher training as well as ongoing training for veteran staff.

States are working to increase their capacity to analyze and understand child data for informed decision-making and program improvement (Kasprzak et al., 2012). Local districts are challenged to ensure that the data is accessible to those who can use it to ultimately improve programs and services for children (Kasprzak et al., 2012).



States are concurrently developing and implementing quality assurance procedures to ensure reliability. The number of children included in the data increased over the last three years; however, states are still challenged with the issue of missing data. As a result, the data does not fully or accurately represent the progress children make while receiving services (Kasprzak et al., 2012). According to the Early Childhood Outcome Center (ECO), 2012, the national data show slight year-to-year fluctuations. “Data quality is expected to continue to increase in future years as states focus on the quality of data for all children and using data for program improvement” (ECO Center, 2012b, p. 2).

Teaching Strategies GOLD Assessment System, for children birth through kindergarten, is an online tool used by Nebraska and a number of other states to collect and report OSEP Child Outcomes. Very limited research was found to validate the tool as a means to measure the development of children with disabilities. In two separate studies, the measurement properties of Teaching Strategies GOLD were found to be highly reliable (Kim & Smith, 2010; Lambert & Do-Hong Kim, 2010).

In a study by Kim and Smith (2010), with children birth to age two, in 20 different care centers, children with disabilities were excluded from the analysis because of the small sample size (Kim & Smith, 2010). Teachers rated an average of five children on 51 items related to 23 basic objectives. Kim and Smith (2010) conclude that there are limited items to assess in the lower end of the developmental continuum and this may limit the measurement information for children at a very young age. This finding is contrary to the recommended

assessment practice guidelines of the Division of Early Childhood, indicating that tools need to be sensitive enough to measure small increments of progress (Sandall et al., 2005). Furthermore, assessment sensitivity is especially important when assessing young children with disabilities.

### **Implications for MOEC**

The goal of intervening early is to change the trajectory or skill acquisition for young children with developmental delays. Accountability in early intervention is necessary. However, the methods of data collection and fiscal implications to school districts need increased attention and ultimately need further research. The Metropolitan Omaha Educational Consortium Curriculum and Instruction Task Force may want to consider focusing on this topic to ensure that the methods required by Nebraska Department of Education (NDE) matches best practices.

According to IDEA, Part C, services for children with disabilities must be provided in the natural environment, which is a setting that children of the same age who have no disabilities learn, play and interact with others on a routine basis (e.g., home, community, and child care settings). Nebraska, and other states, uses a primary service provider approach to provide services to children birth to age 3. This coaching model provides the special education services in the natural environment with the goal of building the capacity of parents and other providers (Shelden & Rush, 2007). The primary service provider approach is effective and children and families demonstrate positive results. However, since the primary service provider interacts with a child and family, on average, one hour a week, data collection is largely dependent on parent or caregiver follow through and reporting.

This raises the question, is a single assessment tool an accurate means to collect outcome data?

At the risk of sounding redundant, the requirement for reporting outcomes to OSEP is only for children in special education, specifically children with developmental delays. If we are results-based and results matter, then are we using an assessment tool that is sensitive and accurate enough to measure the change in skill acquisition particularly for children birth to age 3? Would multiple sources of assessment, to include measures that have been validated with children with disabilities be more reliable?

There are a number of fiscal implications for school districts. First, if a state is using a publisher's online reporting system, as Nebraska does, this comes with a subscription fee per child. In 2013-14, Nebraska Department of Education will require all providers to complete an annual online reliability assessment. There is an initial time requirement to complete this assessment (approximately 4-5 hours) as well as on-going staff development for this NDE requirement. Lastly, outcome data is aggregated within the publisher's online system to determine the percentage of children in both Part B & C that have met the state targets for the three outcomes. These percentages are included in the Part C Annual Performance Report (Indicator 3) and the Part B Annual Performance Report (Indicator 7) and school districts receive a financial compensation for meeting the targets.

Early childhood education continues to receive national attention and this focus is great for children. Assessment and accountability plays a pivotal role in quality early childhood education and intervention. A single assessment tool

should be used as part of the outcome measurement *process*, along with other sources of evidence, not as a stand-alone tool. MOEC may want to consider further research on measuring outcomes for children. A unified and sustained focus on valid and reliable methods for measuring outcomes for young children with disabilities, coupled with quality programs, is needed to improve early children education programs.

### References

- Bagnato, S.J., & Yeh-Ho. H. (2006). High-stakes testing of preschool children: Viola standard for professional and evidence-based practice. *International Journal of Korean Educational Policy*, 3, 23-43.
- Campbell, P. H., & Anketell, M. (2007). Suggestions for statewide measurement systems: Pennsylvania's experience. *Topics in Early Childhood Special Education*, 27(1), 34-48. Retrieved from <http://search.proquest.com.leo.lib.unomaha.edu/docview/62043451?accountid=14692>
- Conn-Powers, M., Piper, A. W., & Traub, E. K. (2010). An approach to evaluating the impact of policy changes in early intervention. *Infants and Young Children*, 23(3), 218.
- Greenwood, C. R., Walker, D., Hornbeck, M., Hebbeler, K., & Spiker, D. (2007). Progress developing the Kansas early childhood special education accountability system: Initial findings using ECO and COSF. *Topics in Early Childhood Special Education*, 27(1), 2-18. Retrieved from <http://search.ebscohost.com.leo.lib.unomaha.edu/login.aspx?direct=true&db=aph&AN=26116542&site=ehost-live>
- Kasprzak, C., Hurth, J., Rooney, R., Goode, S. E., Danaher, J. C., Whaley, K. T., . . . Cate, D. (2012). States' accountability and progress in serving young children with

disabilities. *Topics in Early Childhood Special Education*, 32(3), 151-163. doi: 10.1177/0271121411408119

Kim, D., & Smith, J. (2010). Evaluation of two observational assessment systems for children's development and learning. *NHSA Dialog*, 13(4), 253-267. Retrieved from <http://search.proquest.com.leo.lib.unomaha.edu/docview/822508002?accountid=14692>

Neisworth, J. T., & Bagnato, S. J. (2004). The mismeasure of young children - the authentic assessment alternative. *Infants and Young Children*, 17(3), 198-212.

Rous, B., Lobianco, T., Moffett, C. L., & Lund, I. (2005). Building preschool accountability systems: Guidelines resulting from a national study. *Journal of Early Intervention*, 28(1), 50-64. Retrieved from <http://search.proquest.com.leo.lib.unomaha.edu/docview/62082783?accountid=14692>

Rous, B., McCormick, K., Gooden, C., & Townley, K. F. (2007). Kentucky's early childhood continuous assessment and accountability system: Local decisions and state supports. *Topics in Early Childhood Special Education*, 27(1), 19-33. Retrieved from <http://search.proquest.com.leo.lib.unomaha.edu/docview/620589?accountid=14692>

### **Other Resources**

Bagnato, S.J. (2007) Authentic assessment for early childhood intervention, Best practices. New York: Guilford Press

Carta, J. J. (2002). An early childhood special education research agenda in a culture of accountability for results. *Journal of Early Intervention, 25*(2), 102-104. Retrieved from <http://search.proquest.com.leo.lib.unomaha.edu/docview/62217278?accountid=1469>  
2

Early Childhood Outcomes Center. (2012a). State approaches to child outcomes measurement. Retrieved from [http://projects.fpg.unc.edu/~eco/pages/states\\_approaches.cfm](http://projects.fpg.unc.edu/~eco/pages/states_approaches.cfm)

Early Childhood Outcomes Center. (2012b). Outcomes for children served through IDEA's early childhood programs: 2010-11. Retrieved from <http://projects.fpg.unc.edu/~eco/assets/pdfs/OutcomesforChildren-FFY2010.pdf>

Lambert, R. P., & Do-Hong Kim, P. (2010). *The measurement properties of the teaching strategies GOLD™ assessment system: preliminary results following the winter assessment checkpoint*. Unpublished manuscript.

National Association for the Education of Young Children & National Association of Early Childhood Specialists in State Departments of Education. (2003). Joint position statement: Early childhood curriculum, assessment, and program evaluation.

Nebraska Department of Education. (n.d.) *Results matter in Nebraska: Measuring results for young children and their families*. Retrieved from

<http://www.education.ne.gov/oec/rm/rm.html>

Neisworth, J.T., Bagnato, S.J. (2005) DEC Recommended Practices: assessment. In S. Sandall, M. L. Hemmeter, & B. Smith (Eds.), *DEC Recommended Practices: A comprehensive guide for practical application in early intervention/early childhood special education* (pp. 45-69 ). Longmont, CO: Sophris.

Office of Management and Budget, Expect More.gov (2003) Not performing programs.

Retrieved from

<http://www.whitehouse.gov/sites/default/files/omb/assets/OMB/expectmore/index.html>

Shelden M.L., & Rush, D. D. (2007). Characteristics of a primary coach approach to teaming in early childhood programs. *CASEinPoint*, 3(1), 108. Retrieved from

[http://www.fipp.org/Collateral/caseinpoint/caseinpoint\\_vol3\\_no1.pdf](http://www.fipp.org/Collateral/caseinpoint/caseinpoint_vol3_no1.pdf)

U.S. Department of Education, Ed.gov (n.d.) Building the legacy: IDEA 2004 Retrieved from <http://idea.ed.gov>



**Author's Information**

Jean R. Ubbelohde is has a Certificate of Advanced Study in School Administration and Supervision from SUNY Oswego. She has taught and held administrative and teaching positions in Virginia, California, Nebraska and the Department of Defense Schools. She is currently employed by Millard Public Schools as the Coordinator of Early Childhood Special Education. Ubbelohde is a student in the doctoral program through the University of Nebraska-Omaha.