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The Use of Authentic Assessment in Eligibility Determination for Early Childhood

Intervention Programs

#### A THESIS

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# The Use of Authentic Assessment for Eligibility Determination in Early Childhood Intervention Programs

# \* A THESIS

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#### **Abstract**

The purpose of this study was to survey Part C Coordinators of early intervention programs across the United States and its territories to determine the actual use of authentic assessment methods to determine eligibility for services. The hypotheses were that authentic assessment is not widely used, that elements of authentic assessment are used, and that agencies that use an educational model use more authentic assessment than agencies that use a medical model. This was a descriptive study using quantitative methods designed to determine usage rates of authentic assessment for eligibility determination for early intervention services and any relationships between agency philosophy and the use of authentic assessment. Survey invitations were emailed to Part C Coordinators and results were analyzed to determine usage rates and statistical differences between agencies. No significant differences between the lead agencies and their usage of authentic assessment was discovered. A detailed summary of usage of elements of authentic assessment is included in the study results. It is hoped that this study will increase the focus on authentic assessment to determine eligibility for early intervention services and increase its use, thereby providing better, more individualized services for children with disabilities.

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The Use of Authentic Assessment for Eligibility Determination in Early

Childhood Intervention Programs

Chapter 1—Introduction to the problem

#### Introduction

There is increasing recognition that the first few years of a child's life are a particularly sensitive period in the process of development, laying a foundation for physical growth, cognitive development, and behavioral, social and self-regulatory capacities in childhood and beyond (Gross, 2008). Yet many children face issues such as birth defects, prematurity, or illness during these years that can impair their development. Early intervention programs are designed to support children and their families and lessen the impact of developmental difficulties. Intervention programs also help families and caregivers adjust or adapt to the child's needs and abilities in ways that will impact the child's development and relationships.

There is no standard eligibility definition for early intervention programs across the country. There is also no standard method of determining eligibility across the country. This provides a multitude of possibilities for determining which children will receive early intervention services.

#### **Statement of the Problem**

Federal Law 108-446 Individuals with Disabilities Education Act (IDEA) of 2004 provides for early childhood intervention programs in the United States. The Program for Infants and Toddlers with Disabilities is commonly referred to as Part C of the IDEA. This is a federal grant program that helps states to operate a comprehensive program of early intervention services for infants and toddlers with disabilities and their families (National Early Childhood Technical Assistance Center [NECTAC], 2009). States must ensure that services are available to every eligible child and his/her family. As of December 1, 2004 in the United States and outlying areas, 282,733 children were served by early intervention programs (Danaher, Armijo, and Lazara, 2006).

IDEA mandates that early intervention programs must determine eligibility for services using a rigorous definition of the term *developmental delay* (IDEA, 2004). Eligibility criteria are left up to the individual states to decide, so this creates quite a variance across the country. Some states describe delays quantitatively (the difference between the child's chronological age and performance level, a certain number of months below chronological age, or standard deviation below the norm), and some states describe delays qualitatively (atypical behaviors) (Shackelford, 2006). For example, Shackelford's state-by-state summary of eligibility definitions shows that Oklahoma's early intervention eligibility requirements are that a child exhibits a 50% delay in one or more areas of development or a 25% delay in two or more areas of development, while Texas' requirements are that a child may be exhibit a 2-, 3-, or 4-month delay depending on the child's age. Thus, a 10-month-old in the first state would have to be functioning

like a 5-month-old in gross motor skills in order to be eligible for services, but that same child in the second state would only have to exhibit the functioning of an 8-month-old. Eight states/territories also serve *at risk* populations (NECTAC, 2009). The definition of *at risk* also varies from state to state, but may include conditions of established risk, biological/medical risk, or environmental risk that may place the child in the position of having a substantial developmental delay if they did not receive early intervention services (NECTAC, 2006). This population will not be addressed in this study.

Selection of assessment tools used to determine eligibility is also left up to the individual states, so there is some variability across the country. In some states the selection of the assessment tool used to determine eligibility may even vary from program to program across the state. Some states may have a list of approved assessment tools, while other programs may determine the assessment tool on a program-by-program basis. In general, the instruments used are standardized and norm-referenced (McLean, 2005).

Neisworth and Bagnato (2004) describe authentic assessment as "measurement techniques that capture authentic portraits of the naturally occurring competencies of young exceptional children in everyday settings and routines—the natural developmental ecology for children" (p. 198). There is much to be found in the literature to support the use of authentic assessments, but how commonplace is it in actual practice, especially for eligibility determination for early intervention services? Examples of authentic assessment practices would be evaluating the child in his home or child care setting and noting his behaviors in the naturally occurring routines instead of creating a testing

environment in a clinical setting, having the child parent/caregiver facilitate the test items instead of a stranger (a therapist from the early intervention program), and using toys/objects that are familiar to the child instead of items from the test kit.

#### **Purpose of the Study and Hypotheses**

The purpose of this study was to survey professionals in early intervention programs across the United States and its territories to determine the actual use of authentic assessment methods. Research hypotheses are: 1) that authentic assessment methods are not used on a widespread basis; 2) that elements of authentic assessment methods are used by early intervention programs, but that total authentic assessment is not used; and that 3) there is a link between agency philosophy and the use of authentic assessment.

#### **Theoretical Orientation**

Assessment is a popular topic for researchers and there is much information in the literature regarding authentic assessment. Hanson and Bruder (2001) state that assessment issues have been a persistent concern to the field of early intervention, especially regarding the use of assessment results to mislabel or misdiagnose children as disabled and the use of assessment results to exclude children from services.

Bagnato, Suen, Brickley, Smith-Jones and Dettore (2002) as cited in Bagnato and Niesworth (2004) showed that an authentic assessment model could be used to intervene in a child's development and monitor the child's progress. However, this study was designed to monitor child/program progress over time using quarterly assessments and

ran the course of three years. This would not be feasible when trying to determine eligibility under federal IDEA timeline parameters which mandate that services begin within 45 days of the referral for services.

Neisworth and Bagnato (2004) recommend that the natural assessment be done by multiple observers over a span of 15-30 days. This is cutting it very close to the mandated 45-day federal timeline, but may be possible. It is not very cost-effective, however, to send multiple persons multiple times into the field. Therefore, it may meet with resistance on that front by program administrators.

Neisworth and Bagnato (2004) also point out that when appropriately done, assessment can tell us what to teach, how to teach, and if objectives are being reached. In addition, interventionists want to document competencies, not deficits, in order to establish a foundation for developmental skill building. They set forth eight developmentally appropriate standards by which assessments should be measured. These include usefulness for intervention, social worth and agreement, natural methods and contexts, adaptability for special needs, fine measurement gradations, synthesis of ecological data, parent-professional teamwork, and special design/field-validation/evidence-base (p. 202). These standards, when applied to conventional assessment practices for eligibility determination for early intervention programs point out glaring discrepancies between what is practiced in the field and what is suggested as ideal. Niesworth's and Bagnato's standards may need to be the barometer that states use to determine the appropriate use of their assessments.

Rosetti (2001) lists several guiding principles issued by a *Zero to Three* (1994) working group that should be kept in mind when assessing children under three years of age. These include basing the assessment on an integrated developmental model, using multiple sources of information, using interactions with the child's caregiver to elicit behaviors, using the assessment to identify the child's strengths instead of deficits, collaborating with the child's parents/caregivers, viewing the assessment as the first step in the intervention process, not forcing the child to interact with a strange examiner, and keeping in mind that formal test results are only approximations of the child's true abilities.

Keilty, LaRoco, and Casell (2009) reported in their study, "Early Interventionists' Reports of Authentic Assessment Methods through Focus Group Research," that study participants recognized the value of authentic assessment, but were uncomfortable relying on parent report as justification of their eligibility decisions and liked the comfort of having a standard score available. In addition, the participants appeared to be confused about applying authentic assessment methods during eligibility determination. However, the authors recognized that one of the limitations of their study was that it was just done in one state. They recommended that future research examine interventionists' practices and analyze program policies and procedures. The intent of this author's current study is to examine policies and practices regarding the use of authentic assessment for early intervention eligibility determination on a larger scale.

# **Significance of the Study**

This researcher could not find any studies in the literature documenting the nationwide use of authentic assessment to determine eligibility for Part C services. It is felt that this study will contribute to the research base and promote the use of authentic assessment by causing Part C programs to examine their assessment practices.

#### **Definition of Terms**

Assessment is the collection, review and use of information that is designed to elicit accurate and reliable samples of behavior which can be used to make inferences regarding a child's developmental status (Rossetti, 2001).

Authentic assessment includes "measurement techniques that capture authentic portraits of the naturally occurring competencies of young exceptional children in everyday settings and routines" (Neisworth & Bagnato, 2004, p. 198).

Criterion-referenced assessments are those that measure how well a person has learned specific knowledge/skills.

Curriculum-based assessments are those that measure a person's functional skills based within a certain developmental sequence.

Developmental Delay is described as child functioning below what is considered typical for his/her age level. Specific definitions vary from state to state.

Early Intervention refers to services for infants and toddlers (birth up to age three) with disabilities and their families.

Eligibility refers to the criteria necessary to obtain services. Criteria vary from state to state.

*IDEA* is the Individuals with Disabilities Education Act.

Informed clinical opinion is the use of professional judgment including quantitative and qualitative information such as test scores, parent input, medical information, and other information.

An *interdisciplinary assessment* is conducted by persons from multiple disciplines who interact and collaborate with one another.

Lead agency refers to the state agency which is designated by the governor of each state to oversee the state's Part C program.

A *multidisciplinary assessment* is one that is conducted by persons from multiple disciplines with little influence from one another

The *natural environment* is the child's home or community settings in which children without disabilities participate. IDEA stipulates that early intervention services are to be provided in the natural environment to the maximum extent possible.

*Norm-referenced assessments* are those that compare a person's score against the scores of others who have taken the same test.

Part C is the Program for Infants and Toddlers portion of IDEA.

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Part C Coordinator is the person within the lead agency whose responsibility it is to administer the Part C program in a way that complies with all federal and local requirements (IDEAInfantToddler.org, 2009).

A *transdisciplinary assessment* is one that is conducted by multiple disciplines working together, even relinquishing their discipline-specific roles and cross-training other team members.

#### **Content Overview**

This thesis will look at a brief history of early intervention assessment practices in the United States; aspects of assessment for eligibility for early intervention including different types of assessment, participants, time involved, locations, etc.; assessment philosophies; and the current use of authentic assessment practices by Part C programs across the country.

#### **Chapter 2—Review of the Literature**

#### Introduction

Assessing children has been done for several years, but the practice of assessing infants and toddlers with disabilities is a relatively recent development. A closer look at the history of this process and a history of the development of programs for infants and toddlers with disabilities will provide a better understanding of the process.

#### History

Services for the birth-to-three population were federally mandated with the implementation of Public Law 99-457 in 1986 (Fixsen & Blase, 2009). Since that time, theories and methods of assessment of young children have evolved and what is considered best practice has changed. McConnell (2000) points out that some of the first assessments for early intervention were studies, tools and systems developed for medical professionals to identify children with developmental delays or learning disabilities.

According to McConnell, during the 1960s and 1970s, many interventionists used task analysis or developmental checklists as a basis for their intervention. In the past, subjective information (i.e., the child's feelings and intentions) was generally not considered in assessments (Westby, StevensDominguez, & Oetter, 1996). Casby (2003) notes that as far back as 1975, Siegle observed that a professional who has knowledge of an area and the ability to observe, describe, and evaluate important behaviors and areas of development is one of the best assessment instruments available. However, for the most

part interventionists have relied on standardized assessment instruments to determine eligibility for services.

#### **Lead Agency**

The governor of each state must designate a lead agency to oversee the Part C program. Within that agency, a person is designated as the Part C Coordinator. The coordinator's responsibility is to administer the program in a way that complies with all federal and local requirements (IDEAInfantToddler.org, 2009). The designated lead agency for each Part C program may vary. In some states, it is the Department of Education. In other states, it may be the Department of Health. In still others, it may be the Department of Mental Health.

These variations in lead agency may result in philosophy differences in practice, i.e. a *medical model* versus an *educational model*. A medical model of early intervention is one that is based on diagnosis and treatment. Usually, diagnosis drives treatment which indicates likely outcome (Rosetti, 2001). Medical models typically involve a heavy emphasis on diagnosis and intensive, direct therapy. An educational model is one that is based on how the disability affects functioning in the educational setting. Rosettie feels that it is not necessary to know why the child has a delay before starting intervention. In the case of early intervention, the "educational setting" would be the child's home or child care. Emphasis would be on adapting the environment and educating the caregivers in teaching functional skills to the child. This researcher's experience has been that each early intervention program's guiding philosophy (medical vs. educational) will also guide the method of eligibility determination and eventual

service delivery. If the lead agency is a health department, it will more than likely be driven by a medical model. If the lead agency is a department of education, it will more than likely be driven by an educational model. In states where the early intervention programs are provided by a variety of providers, the same logic follows. If services are provided by a rehabilitation facility, they are more likely to be based on a medical model. If services are provided by a school district, they are more likely to be based on an educational model. According to Guralnick (2000), intensity, form and comprehensiveness of services are more dependent on local preferences than empirical findings.

Although both the medical model and the educational model may have their relative strengths in certain situations, "both models focus on a child's deficits and do not adequately account for a child's skills in performing daily living activities in natural environments at home and in the community" (Msall, 2005, p. 264). Assessed deficits tend to obscure functional strengths. In addition, Msall indicates that assessments using pass/fail criteria ignore a child's qualities such as curiosity, persistence, and flexibility during task performance. Often a disproportionate amount of time and effort is spent in the initial assessment, leaving fewer resources available for monitoring progress and implementing services (Msall, 2005).

#### **Types of Assessment**

Assessment tools used for eligibility determination may be norm-referenced, curriculum-based, or criterion-referenced. Norm-referenced tests compare a person's score against the scores of a group of people who have already taken the same exam

(FairTest.org, 2007). Norm-referenced tests have standardized procedures for administering test items and for scoring. Test items must be administered in a narrowly defined fashion, and the child's responses must also fit a narrow pattern of response (Rosetti, 2001). Rosetti has stated that for typically developing children, norm-referenced tests do not have much predictive significance until approximately 3 years of age. When considered for children with special needs, the value of these types of assessments becomes even more questionable. In addition, Rosetti indicates that results received from norm-referenced tests do not have much value for planning intervention activities. Some examples of norm-referenced tests that are frequently used for eligibility determination for early intervention are: the Bayley Scales of Infant Development—

Second Edition (BSID-II), the Kaufman Assessment Battery for Children (K-ABC), and the Preschool Language Scale—Fourth Edition (PLS-4) (Berry, Bridges, & Zaslow, 2004).

Criterion-referenced tests are intended to measure how well a person has learned specific knowledge or skills (FairTest.org, 2007). An advantage of criterion-referenced tests is that there is more flexibility in elicitation of behaviors (Rosetti, 2001). In addition, parent report may be a source of data collection. Rosetti states that results of criterion-referenced tests are more useful for planning intervention strategies than the results of norm-referenced tests. An example of a criterion-referenced test that is frequently used for eligibility determination for early intervention is the High/Scope Child Observation Record (COR) (Berry, et al., 2004).

Curriculum-based assessments are those that measure a child's ability to perform functional skills within a certain developmental sequence (Florida Department of Health, 2009, p. 5). Examples of curriculum-based assessments that are commonly used to determine eligibility for early intervention are the Hawaii Early Learning Profile (VORT Corporation, 2009), and the Carolina Curriculum for Infants and Toddlers with Special Needs (Brookes Publishing, 2009). However, these types of assessments are typically not used for determining eligibility for early intervention services because they do not yield norm-referenced scores (McLean, 2005).

A discussion with professional colleagues in the field suggested that the use of norm-referenced tests only helps the child obtain services because they will perform so poorly. It is difficult to argue with this logic. However, Westby, DominguezStevens, and Oetter (1996) state:

Although standardized, norm-based assessments may be sufficient to determine if a particular child should receive services, they may not be sufficient to answer the questions of the referring person, and they are not sufficient to determine the appropriate educational placement or to write the Individual Family Service Plan (IFSP) or Individual Education Plan (IEP) (p. 151).

Therefore, if the results of the deficits-based assessment are then used for intervention planning, it would seem that intervention strategies would be pointless in some cases. For example, if one were holding tryouts for a remedial baseball camp and one of the potential participants was blind, how would one test his ability to catch a ball? One can throw a ball at him, and if he doesn't catch it, he gets into the camp because he has poor

catching skills. However, if one threw him a ball that beeped he could catch it every time. In addition, the reason he wanted into the camp was to work on his base-running skills, not his catching skills. Niesworth and Bagnato (2004) state that "conventional tests have been neither developed for nor field-validated on infants, toddlers, and preschoolers with developmental disabilities. Thus, contrary to professional wisdom in the fields, conventional tests have no evidence-base for use in early intervention" (p. 198). In addition, Rosetti (2001) points out that valuable intervention time may be lost while waiting for a child's delay to progress to the point that it is measurable on a test.

Westby, StevensDominguez, and Oetter (1996) state that the types of assessments selected can be determined by the type of information one is trying to obtain. If one wants to compare a child's level of performance to his peers, one would use a norm-referenced assessment; if one wants to know what knowledge a child has or has not acquired, one would use a criterion- or curriculum-referenced assessment. However, as McConnell (2000) points out sometimes tests produce reliable, but unneeded, information. Westby, et al. (1996) state that if the intent is to determine how responsive the child is to intervention, the problem-solving processes the child uses, or what factors change the child's performance, one would want to use a dynamic assessment. This involves "systematic observation of ongoing behavior" (Westby, et al., 1996, p.145). Westby, et al. feel that these types of assessments are particularly useful in documenting factors that are not easily measured by traditional tests. It would appear, then, that a dynamic assessment would be very useful for early intervention purposes.

Play-based assessments are another method of assessing infants and toddlers.

Casby (2003) states that much information can be revealed about the developmental status of an infant, toddler, or young child through the observation, assessment, and evaluation of his or her play. Transdisciplinary play-based assessments are typically used for children under the age of six years and are conducted using structured and unstructured play activities with an adult facilitator, the child's parents/caregivers, and even other children (siblings) participating (Rosetti, 2001). Casby has stated that for children with disabilities, play activities may be some of the only performances available for observation. Rosetti feels that a play-based assessment contributes to the authenticity of a child's assessment information in that it can be adapted to the child and considers every child as testable because it is based on what the child can do and not what the test protocol dictates.

This focus on a child's capabilities instead of deficits is one important aspect of authentic assessment. This often helps both teachers and parents/caregivers to reframe the child's abilities into a more positive light. Campbell, Milbourne, & Silverman (2001) conducted research on a professional development activity that helped child caregivers focus on a child's strengths. They found that caregivers often described children by their deviations from expectations (Campbell, et al. 2001). Interestingly, Campbell, et al. also found that when caregivers held this deficit view, they saw themselves as unable to influence the development of the child through either their relationship with or their instruction of the child. Upon completion of the strengths-based child portfolio professional development activity, participants in this study perceived the children with

disabilities as more competent (sometimes even disregarding the disability entirely in describing the child) and themselves as more competent as caregivers.

Focusing on the child's competencies requires a shift from a deficits-based traditional assessment approach to a strengths-based assessment approach. Guillory and Woll (1994) suggest that the primary frame of reference should be the family's perception of the child. They state that an atmosphere that promotes sharing of family perceptions should be created by professionals by demonstrating respect for the family's observations and comments, and acknowledging their expertise and knowledge of their child. In addition, what the parent sees as a need for their child may be shaped by their culture and family values. Guillory and Woll believe that general developmental stages may not have any meaning for individual families.

As Fewell (2000) states, the purpose of assessment should be to gain valid, reliable, and useful information without penalizing the child by the limitations of our measurement tools. Although there appears to be consistency across measures in the types of skills assessed, there is not much consistency in the way that those skills are measured (VanDerHeyden, 2009).

#### **Informed Clinical Opinion**

In addition to determining eligibility by the use of an assessment tool, federal law allows for the use of *informed clinical opinion* to help determine if a child has a developmental delay (IDEA, 2004). Informed clinical opinion has been defined as the use of both quantitative and qualitative information that has been gathered about a child

including parent input, medical records, and other information (Florida Department of Health, 2009). Shackelford (2002) describes the use of informed clinical opinion as a safeguard against eligibility determination based upon isolated information or test scores alone.

Informed clinical opinion can be invaluable in situations that are less than optimal for assessment or in which the assessment tool is lacking. Rosetti (2001) states that the key to a constructive assessment is not necessarily the test used, but the proficiency of the assessor. Rosetti suggests that a good assessor must be an effective elicitor, observer, and interpreter of a child's behaviors. Being an excellent administrator of a test protocol does not necessarily make one an effective assessor of a child's behavior. Rosetti warns that assessors should be cautious of becoming test-dependent.

#### **Multidisciplinary Assessment**

Federal law mandates that the assessment be conducted by a multidisciplinary team, so there are always multiple evaluators involved. Although the law mandates a multidisciplinary team, there is some variation of interpretation of this as the term "multidisciplinary" can be viewed as a philosophy of assessment as well as just a description of the assessment team (more than one person). Some programs may allow for one evaluator to conduct his assessment at a separate time from the other evaluator. This may lead to multiple evaluations with multiple practitioners.

Assessment teams have been classified as *multidisciplinary*, *transdisciplinary*, or *interdisciplinary*. Lyon and Lyon (1980) as quoted in Westby, StevensDominguez, and

Oetter (1996) describe multidisciplinary teams as having members from multiple disciplines, but the members conduct their own evaluations, write their reports independently, and have little influence on one another. They describe interdisciplinary teams as having more interactions among team members with each member using information and suggestions from the other members in interpreting their data. Usually, the evaluation report and intervention plan are written collaboratively. They describe transdisciplinary teams as multiple disciplines working together in the initial assessment with the provision of services being conducted by one or two team members. It is distinguished by role release where each member cross trains the others. Typically, the child is assessed by multiple professionals of different disciplines at the same time with the parents viewed as an integral part of the assessment team (Rosetti, 2001). Rosetti also describes this as an arena assessment.

The value of a team approach to assessment cannot be stressed enough. Each person's unique perspective, training, and experience are quite valuable to an integrated assessment of the whole child. As Westby, StevensDominguez, and Oetter (1996) state: "Team assessment is critical because no single person can possess all the knowledge or skills necessary to assess an individual and develop an intervention plan that will address all of the child's needs" (p. 146). Most importantly, no one has more information on the functioning of that child in natural environments than the parents/caregivers.

"Professional" team members need to remind themselves that they are not the experts on a particular child's development—they are an expert in an area of study. The child's parents/caregivers are the experts on that child's functional development.

#### **Functional Capabilities**

Functional capabilities are typically described as those that are considered essential in the child's natural environment. Many factors contribute to what is considered essential including the family's or culture's expectations, environmental factors, and context. What is functional in one environment may not be in another. A physical education teacher might view a child who only has one leg as having limited functioning in his class, while the art teacher might view a child who only has one leg as very functional in her class. However, for purposes of determining eligibility for early intervention services, functioning is typically viewed as how the child performs at a given moment according to criteria on a test.

#### **Child State**

The child's level of alertness at any given moment in time is also a factor in assessment outcomes. This level of alertness is considered the child's overall state (Rosetti, 2001). A child's state can be affected by physiological as well as environmental factors. Rosetti points out that these may include hunger, general health, where the child is in his/her sleep/wake cycle, and the child's overall level of alertness. A child who is at risk or medically fragile may not be able to exhibit his best functional abilities. Rosetti describes the state of *reciprocity* as the optimal time for obtaining assessment information. This is a time when the child is healthy and able to respond to the environment in predictable ways, such as smiling, vocalizing, and interacting with caregivers (Rosetti, p. 111).

# **Correction for Prematurity**

When assessing a child who was born premature, the question of adjusting for that prematurity arises. A child who was born at 28 weeks gestation and has spent eight weeks in the neonatal intensive care unit has a chronological age of eight weeks (two months), yet her adjusted age is that of a 36-week fetus, technically not even a newborn. Should the child be assessed according to her chronological age or her adjusted age? If one adjusts for prematurity, how long should adjustments be made? Twelve months? Twenty-four months? It is generally agreed that adjusting for prematurity during the first twelve months results in more accurate developmental expectations (Rosetti, 2001).

When determining eligibility for early intervention, adjusting for prematurity levels the playing field for premature infants in that it does not hold a chronologically six-month-old infant with an adjusted age of four months to the same developmental standard as a full-term six-month-old. However, some norm-referenced assessment tools may be invalidated if adjustments for prematurity are made during administration of the test.

#### **Assessment Settings**

Assessment for eligibility for early childhood intervention may take place in a variety of settings: the child's home, child care, early intervention center, hospital, clinic, etc. Of those settings, only the child's home or child care would be considered a natural environment to the child. However, Guillory and Woll (1994) state that center-based

assessments can be conducted in friendly, informal, comfortable surroundings within a naturalistic context.

While the most natural assessment setting is the child's home, and efforts are sometimes made to make the clinic/office resemble a child's home, Niesworth and Bagnato (2004) point out that such attempts are an improvement over a clinical setting and will increase the chances that typical behavior will be exhibited during the testing session; however, "the unfamiliarity of the setting and testing demands trump any efforts to make child and parents 'feel at home.'" (p.208). Bailey and Wolery (1989) as quoted in Westby, StevensDominguez, and Oetter (1996) maintain that "assessments conducted by strangers, using irrelevant tasks and in isolated settings will be limited in usefulness" (p. 145).

Rosetti (2001) points out that a home-based assessment would be more reflective of the child's natural interactions with the environment in which they are learning; however, the home may also be very distracting and may yield less than optimal samples.

In 1977, Brooks and Baumeister as cited in Fewell, (2000) published an article which introduced the idea of considering *ecological validity* when working with persons with mental retardation. This concept stresses the importance of factors in the environment which contribute to the lives (functioning) of persons with disabilities, suggesting a way to see a child's competencies in context. Fewell states that while assessments in a clinic also give her important information, ecologically valid assessments give her information she values most.

#### **Assessment Participants**

Part C of IDEA specifies the types of practitioners that are qualified to deliver early intervention services. These include paraprofessionals, special educators, speech pathologists, physical therapists, occupational therapists, physicians, nurses, social workers, etc. Any of these practitioners may be called upon to assess the child for eligibility for early intervention services.

Persons participating in the assessment may vary from practitioner and child with parent/caregiver to practitioner and child alone. Persons interacting with the child and facilitating administration of test items may also vary from a single practitioner, multiple practitioners, or parent with practitioner coaching. There may also be a combination of any of the above. Methods of interaction will vary depending on the allowable test protocol, practitioner expertise/comfort, and child's comfort level/stranger anxiety.

Family/caregiver involvement in the assessment process also varies. Sometimes this is dictated by the assessment protocol, and sometimes it is a matter of program philosophy/practice. However, information collected during the assessment should be supported by information gathered from interviews with the caregivers (Rosetti, 2001).

#### **Length of Assessment**

The time involved in each assessment may vary depending on the age of the child, practitioner's comfort level with the assessment tool/assessment process, child's cooperativeness, assessment protocol, and other factors. Assessment for eligibility may take as long as two hours in some cases.

An argument for longer assessment sessions could be made because the assessor would then have more time to gather more authentic information about the child. However, lengthy assessments for infants and toddlers may appear to be counterproductive. Spending extra time gathering information that may or may not be useful could be "at best inefficient and at worst unethical" (McConnell, 2000, p. 44). Some programs, therefore, conduct shorter, multiple sessions in order to gather information across multiple natural settings (such as home and child care).

#### **Effects on Parents**

In addition to the effects of the assessment process on the child, one must consider the effect of these eligibility determination evaluations on the parents. The diagnostic/assessment process is extremely stressful for families and can challenge their coping resources (Turnbull et al., 1993, as cited in Guralnick, 2000). During my professional experience in the field, one parent described IFSP meetings as "emotionally draining." She said that she was told all the things her child can't do because he has Down Syndrome. She said that she was told things she didn't want to hear, but had to hear (personal communication, 2009). What effect does the practice of using deficits-based assessments have on a parent's/caregiver's perceptions of their child and his/her abilities? Does it needlessly focus on the child's disabilities? Why does this parent feel that she *has* to hear all the things her child cannot do? The child's initial assessment is often one of the first encounters between the family and the early intervention team. This presents a critical opportunity for professionals to begin developing a relationship with families (Guillory & Woll, 1994). According to Guillory and Woll, best practice for

early intervention programs calls for family-centered interactions with parents viewed as equal partners in the process, yet the traditional assessment process often puts the professional in the expert role thereby potentially establishing an unequal relationship with the family. If a family-centered philosophy is professed to be used in the field of early childhood intervention, then family input should be solicited in designing the assessment process for a child, interpreting the information gained from the assessment, and planning the intervention strategies (Westby, StevensDominguez, & Oetter, 1996). In addition, if families do not feel vested in the assessment process, they may be less likely to follow through with intervention. Westby, et al. (1996) suggest that families may not readily participate in intervention activities if they feel that professionals do not respect their values and beliefs.

#### **Usefulness for Intervention Planning**

Another aspect of assessment is whether the results are only used to determine eligibility or if they are also used to plan intervention strategies. Assessment results that determine that a child is delayed in gross motor skills as evidenced by a norm-referenced evaluation tool does not yield much information for planning intervention strategies in the child's home, child care setting, or at the park. Fewell (2000) feels that authentic, ecologically valid assessments yield functional curriculum goals and successful strategies.

#### **Premise**

Given all these possible variables, obtaining reliable, valid, and useful assessment information for infants and toddlers would appear to be unlikely. However, the law mandates that some criteria be used to define *developmental delay* and that each child receives a multidisciplinary assessment of his/her strengths and needs (IDEA, 2004). An often overlooked aspect of conventional tests is that they have neither been developed for nor field-validated on infants, toddlers, and preschoolers with developmental disabilities. "Thus, contrary to professional wisdom in the fields, conventional tests have no evidence-base for use in early childhood intervention" (Neisworth & Bagnato, 2004, p. 198). Hanson and Bruder (2001) point out that the use of norm-referenced assessments on children whose responses may deviate from the norm has shown to be problematic.

This study will gather data on assessment policies and procedures from surveys disseminated to all the State Part C Coordinators (including the Department of Defense and U. S. Territories). The data gathered will include policies regarding eligibility determination, selection of assessment tools used for eligibility determination, and assessment practices including the use of authentic assessment or aspects of authentic assessment.

#### Chapter 3—Methodology

#### Introduction

One research hypothesis for this study is that authentic assessment is not used on a broad basis to determine eligibility for early childhood intervention. However, aspects of the assessment process may be deemed to be authentic in nature even though the entire process is not. The lack of research on this subject points to the need for this type of study.

This researcher feels that the scope of this study may lead to increased focus on the use of authentic assessment to determine eligibility for early childhood intervention services. This, in turn, may lead to increased overall use of authentic assessment, more accurate identification of children who are in need of intervention services, the gathering of information that is more useful in planning individualized interventions, and decreased program costs due to serving only children who would actually benefit from intervention services.

# **Participants**

Participants for this study were obtained via a selective process. Part C

Coordinators were selected as the target population as they are in charge of program administration and this researcher felt they would be representative of each state's general philosophy regarding assessment for early childhood intervention. A list of Part C Coordinators was obtained from the National Early Childhood Technical Assistance

Center (NECTAC). This list (which is publicly available information) was used to obtain

the names and email addresses of all the Part C Coordinators in the United States and its territories. Additional participants from the field of early intervention were included in the study as a result of the study being forwarded in some instances by the Part C Coordinators.

#### **Study Design**

Key (1997) suggests that descriptive research is used to describe the current status of a phenomenon with respect to its variables. According to Jefferies (1999), the value of descriptive research is that it allows the researcher to use a logical and systematic approach to gathering information. Surveys are one way of collecting data to obtain a clearer picture of the status quo. The University of Nebraska Kearney (2010) explains that survey research is based on the idea that a sample of individuals can represent the entire population. This study of authentic assessment to determine eligibility for early intervention is a descriptive study using quantitative methods designed to determine usage rates of authentic assessment for eligibility determination for early intervention services and any relationships between agency philosophy and the use of authentic assessment.

A cover letter was included with the survey in order to explain the purpose of the survey and how the results will be used (see Appendix B). A definition of authentic assessment was included in the cover letter so the characteristics were clear to the respondents.

A survey was developed (see appendix C) using attributes of authentic assessment identified in the literature, specifically, the developmentally appropriate assessment practices put forth by Neisworth and Bagnato, 2004, and Rosetti's (2001) guiding principles for assessment of children under age three: type of assessment instrument used, location of assessment, involvement of primary caregiver, use of assessment results to develop functional outcomes, use of artifacts, the use of informed clinical opinion, use of assessment results to identify the child's learning and interaction styles, the use of transdisciplinary assessment, cultural sensitivity, use of items familiar to the child, adherence to test protocol, use of adaptations for children with disabilities, inclusion of information from other sources (medical, child care), length of assessment, number of participants, number of assessment tools, and number of assessment sessions. The survey was kept as brief as possible in order to elicit maximum cooperation from the target population, while being as thorough as possible in order to achieve the desired results.

Survey questions were created in order to gather information regarding each state's policies regarding assessment for eligibility determination, the respondent's perceived use of authentic assessment, the actual use of authentic assessment elements, the use of information received from assessment (eligibility, intervention planning, individual progress), and the use of informed clinical opinion in the assessment process. For questions regarding frequency rates of elements of authentic assessment, survey responses were limited to never, rarely, sometimes, most of the time, and always. Space was allowed for "other" information, explanation of responses, and comments.

#### **Data Collection**

Surveys were completed online via Survey Monkey. An email link was sent to the Part C program coordinators. A total of 62 survey invitations were sent out. The Coordinators were, in turn, asked to forward the survey link to others in the early intervention field (snowball effect) in order to generate as many responses as possible. Castillo (2009) explains that snowball sampling is useful when the sample to be studied is a small subgroup of the population. A turn-around timeline of three weeks was given to the respondents in order to allow ample time for them to complete the survey at their convenience, while still allowing time for analysis of the results. After two weeks, a reminder email was sent to the Part C coordinators. A total of 71 survey responses were received.

#### **Data Analysis**

Responses were analyzed in order to determine prevalence rates overall of authentic assessment for eligibility determination for Part C programs. Item analyses to determine prevalence rates of individual aspects of authentic assessment were also conducted. The Survey Monkey website analyzed some of the data such as response rates. Relationships between the variables were analyzed using Statistical Package for the Social Sciences (SPSS) software.

An authentic assessment scale was developed by assigning a score of one to five to the responses to the survey questions regarding elements of authentic assessment.

There were twenty total elements of authentic assessment. A response of "never"

received a score of one, "rarely" received a score of two, etc. up to the maximum score of five for a response of "always." Elements of authentic assessment that only had three choices, such as the type of assessment conducted, were given a score of one, three, and five. These twenty elements were summed, giving a total authentic assessment score to each respondent. Each of the twenty items was weighted according to its contribution to authentic assessment. Items that were considered to be most essential were weighted more than others (see Table 1). In addition, items that were considered to be less essential or whose definitions were potentially confusing to the respondents were weighted less. See Appendix E for an explanation of each item's weighting.

Table 1
Weighted Survey Responses

Survey Item	Weight
Use authentic assessment	1.5
Use standardized assessment instrument	1.1
Assessment conducted in child's natural environment	1.25
Primary caregiver involved in eligibility determination	1.1
Information used to determine functional outcomes	1.5
Artifacts are gathered	1.5
Learning style	1.5
Interaction style	1.25
Assessment type—interdiscplinary, multidisciplinary, transdisciplinary	1.5
Cultural sensitivity	1.5
Use of items from the child's environment	1.25
Protocol strictly followed	1.1
Parent/Caregiver input included	1.5
Adaptations are made	1.5
Length of assessment	1.25
Information from other sources	1.25
Number of participants in the assessment process	1.1
Use of informed clinical opinion	1.5
Number of assessment tools	1.1
Number of evaluation sessions	1.1

# **Planning for Quality**

To ensure the accuracy of the Part C Coordinators' email addresses, a current list was printed from the NECTAC website just prior to the survey invitations being sent.

In order to assure the protection of the subjects, the survey cover letter clearly stated the purpose of the survey and the information to be gathered. Participation was completely voluntary and no incentive for completion was offered. Demographic information that was obtained included identifying information by state and, in some cases, by program. Personally identifying information was not obtained. The survey was approved by the University's Internal Review Board (see Appendix A), and this researcher completed the web-based training course in "Protecting Human Research Participants" (see Appendix D).

Survey respondents were able to complete the surveys at their leisure and in the setting of their choice. There was no time limit once the survey was begun, so respondents could take as much or as little time as needed to complete it.

## **Chapter 4—Findings**

#### Introduction

Initial survey invitations were emailed to 62 Part C Coordinators. A response rate of 40% was anticipated; however, the snowball effect elicited 71 responses. Some initial survey invitations did not make it to their intended recipients due to their being out of the office or the email being undeliverable for unknown reasons. The Survey Monkey website analyzed some of the data such as response rates and SPSS was used to analyze relationships among variables.

When reporting the results of this study, it is important to bear in mind a few issues. One is that the target audience, Part C Coordinators, who were selected for their representative ability of early childhood intervention practices in general, may not be able to accurately report on actual practices in the field. The intended snowball effect of asking respondents to forward the email to others in the field can only be as successful as it is forwarded. Another issue is that because the surveys are identifiable to the individual programs, participants may have been reluctant to respond if they felt their state/territory may be portrayed in a negative light or that the information may be used punitively.

#### **Descriptive Data**

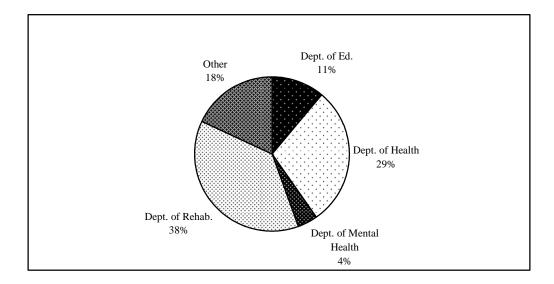
Survey responses were widely spread across the eastern two-thirds of the country with very few responses from the western third.

Thirty-eight percent of the respondents were in the 41-50 year old age group. A vast majority of the respondents were Caucasian (85.7%) and female (95.7%).

The majority of the survey responses (81.7%) came from three states: Texas, Kansas, and Indiana. This researcher knows several people in the field of early intervention in Texas which would explain the number of responses from that state. The number of responses from Kansas and Indiana can only be explained by the Part C Coordinators in those states forwarding the survey to others in the field.

A surprising finding was that the most represented lead agency was the Department of Rehabilitative Services (38%). Because early childhood intervention is mandated by a special education law, this researcher assumed that the lead agency most often represented would be the Department of Education. This was not the case. However, because there were so many respondents from Texas where the lead agency is the Department of Rehabilitative Services, this percentage may be more of an indicator that there were more responses from a state where that was the lead agency rather than an actual significant difference in lead agencies. "Other" lead agencies comprised 18.3% of the responses and included the Department of Human Services, the Department of Developmental Services, local school district, Early Care and Education, Community Developmental Disability Organization, Family and Social Services Administration, and local county Infant Toddler Services. Two respondents did not know the name of their lead agency. (See Figure 1.)

Figure 1. Lead agency



The personnel who determine eligibility do not always work for the lead agency (see Figure 2). Sixty-two percent of the respondents reported that another agency's personnel determine eligibility. These other agencies include the Department of Human Services, the local school district staff, the Department of Public Health and Social Services, and contracted vendors. In some cases, a combination of agency staff determine eligibility. One response indicated that Medicaid was the ultimate determiner of eligibility. This response is disturbing to this researcher in that it indicates that eligibility is determined based on whether Medicaid will reimburse the program for that child's services rather than the child's actual need for services.

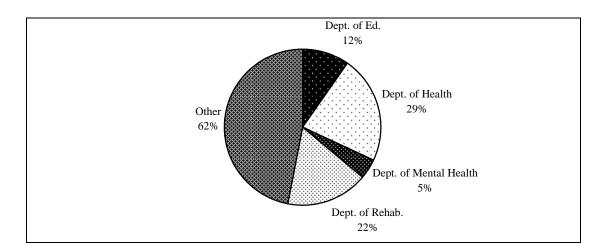


Figure 2. Agency that determines eligibility

Agencies other than the lead agency also determine service needs/develop the IFSP according to about 63% of the respondents. Specifically, the Department of Human Services, licensed infant development providers, the local school district personnel, and contracted vendors develop the IFSP. Again, in some cases a combination of agency staff determine the child's service needs.

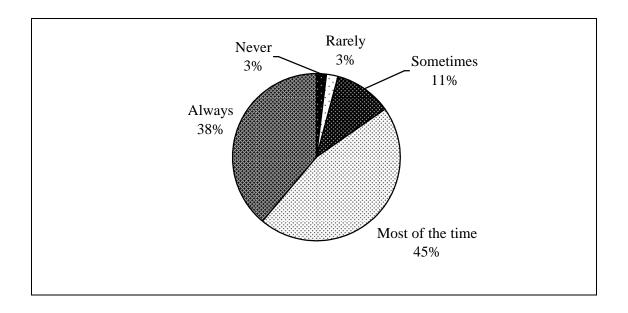
According to about 66% of the respondents, early intervention services are also provided by agencies other than the lead agency. Specifically, licensed infant development providers, local school district staff, and contracted vendors. Sometimes multiple agencies' personnel may provide services to eligible children.

#### **Results**

Hypothesis 1—Authentic assessment methods are not used on a widespread basis. The results would seem to support this hypothesis (see Figure 3). Thirty-eight percent of the respondents reported that they always use authentic assessment practices.

About 45% of the respondents reported that they use authentic assessment practices most of the time. However, 35.2% of the respondents indicated that a standardized assessment instrument is always used for eligibility determination. The literature review shows that the use of standardized assessment instruments does not contribute to an authentic assessment as these instruments have not been standardized using children with disabilities. This would seem to be contradictory—one cannot claim to always use authentic assessment and also use a standardized assessment instrument. A closer look at the 27 individual responses of those who reported always using authentic assessment shows that 46% of them also report always using a standardized instrument. One explanation may be that the use of a standardized instrument is often mandated by policy and is therefore unavoidable. In addition, the use of a standardized assessment instrument is the easiest way of determining a child's eligibility or lack of eligibility for services in a consistent and defensible manner.

Figure 3. Self-reported use of authentic assessment



About half the respondents reported the name of the assessment instrument used by their program to determine eligibility. The assessment instrument most often reported as being used to determine eligibility was the Assessment, Evaluation, and Programming System for Infants and Children (AEPS). Twenty-one percent of the respondents reported using the AEPS. AEPS is a curriculum-based program that "links assessment, intervention, and evaluation for children from birth to six years who have disabilities or are at risk for developmental delays" (Paul H. Brookes Publishing, 2007). This is an interesting finding because previous research has shown that curriculum-based assessments are typically not used for eligibility determination because they do not yield norm-referenced scores (McLean, 2005). Other common assessment instruments used were the Hawaii Early Learning Profile (also curriculum-based), Battelle Developmental Inventory (BDI; norm-referenced), and the Developmental Assessment of Young Children (DAYC; norm-referenced). The use of the AEPS may indicate a move toward more authentic assessment in that the publisher indicates that it has been validated for use with children with disabilities.

Figure 4 shows the group statistics for this sample, including the mean and standard deviation. This information shows us the average score for the group and how much variation there is from the mean.

Figure 4. Group statistics

**Group Statistics** 

	leadage ncydi	N	Mean	Std. Deviation	Std. Error Mean
TotalAuthAssWGT	1.00	7	4.8459	.39937	.15095
	.00	64	4.9219	.38960	.04870

**Independent Samples Test** 

indeper			лоропас		р.ос					
		Levene for Equ Varia	ality of			t-te	st for Equa	lity of Mean	ıs	
		Varia					ot for Equa	inty of Mount	95	5%
									Confid	dence
									Interva	I of the
									Differ	ence
						Sig.				
						(2-	Mean	Std. Error		
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
TotalAuthAssWGT I	Equal	.043	.837	-	69	.626	07601	.15544	38611	.23409
,	variances			.489						
	assumed									
	Equal			-	7.307	.646	07601	.15861	44789	.29587
,	variances not			.479						
	assumed									

Comparing the self-reported rates of authentic assessment to the actual authentic assessment rating given to respondents based on their responses to the survey questions shows that the programs are fairly accurate in their self-assessments, but tend to overestimate their usage of authentic assessment slightly (see Table 2). Most (77%) overestimated their use of authentic assessment. When looking at the weighted scale, 84.5% overestimated their use of authentic assessment. The 27 respondents who reported

always using authentic assessment did have higher scale ratings overall, but did overestimate their usage 100% of the time.

Table 2
Self-Assessment Ratings and Ratings Scale Scores

		1	XX7 - 1 - 1 - 4 - 1	
	Calf Damantad	Dow	Weighted Self-	Waightad
Dagman dags	Self-Reported Authentic	Raw		Weighted
Respondent	Assessment	Rating Scale	Reported	Rating Scale
		(1-5)	Assessment Rating	(1-7.5)
	Rating (1-5)	(1-3)	(1.5-7.5)	(1-7.3)
			(1.5-7.5)	
1	4	3.59	6	4.88
2	4	3.65	6	4.94
3	4	3.35	6	4.36
4	2	3.47	3	4.43
5	5	3.76	7.5	5.09
6	3	3.59	4.5	4.74
7	1	3.12	1.5	4.04
8	5	3.94	7.5	5.13
9	4	4.18	6	5.29
10	4	3.94	6	5.24
11	5	3.88	7.5	5.24
12	5	3.94	7.5	5.26
13	5	4.06	7.5	5.37
14	5	4.06	7.5	5.21
15	5	4.12	7.5	5.42
16	4	4.06	6	5.3
17	4	3.35	6	4.51
18	5	3.29	7.5	4.64
19	5	3.65	7.5	4.8
20	4	3.47	6	4.63
21	4	3.12	6	4.03
22	1	3.41	1.5	4.2
23	4	3.71	6	4.91
24	3	3.53	4.5	4.72
25	5	3.41	7.5	4.8
26	5	4	7.5	5.38
27	4	3.71	6	5.14
28	5	3.82	7.5	5.12

29 30 31 32 33 34	4 5 4 4 5	3.35 3.71 3.41 3.41	6 7.5 6	4.61 5.07 4.54
31 32 33	4	3.41	6	
32 33	4			151
33		2 / 1		4.34
33	5	J. <del>4</del> 1	6	4.72
34	•	3.41	7.5	4.66
	5	4	7.5	5.45
35	4	3.06	6	4.17
36	5	3.53	7.5	4.91
37	5	3.29	7.5	4.57
38	3	3.53	4.5	4.57
39	5	3.59	7.5	5.08
40	4	3.53	6	4.8
41	2	4.12	6	5.42
42	2	3.59	3	4.68
43	5	3.94	7.5	5.25
44	4	3.71	6	4.79
45	5	4	7.5	5.57
46	4	3.65	6	4.76
47	4	3.53	6	4.91
48	5	3.59	7.5	4.76
49	4	3.82	6	4.99
50	4	3.47	6	4.53
51	4	3.18	6	4.17
52	4	3.88	6	4.97
53	4	3.82	6	5.05
54	5	3.76	7.5	5.0
55	4	4.06	6	5.33
56	3	3.24	4.5	4.29
57	5	3.94	7.5	5.41
58	5	4.29	7.5	5.55
59	4	3.71	6	5.03
60	4	4	6	5.14
61	5	3.82	7.5	5.12
62	4	3.59	6	4.76
63	4	3.82	6	5.09
64	4	3.53	6	4.74
65	3	3.41	4.5	4.51
66	4	3.76	6	5.13
67	3	4.12	4.5	5.11
68	5	4.53	7.5	5.96
69	4	3.59	6	4.76
70	5	3.53	7.5	4.93
71	3	3.94	4.5	5.18

# Hypothesis 2—Elements of authentic assessment are used but total authentic assessment is not. Figure 5 shows the descriptive statistics for each variable that was included in the survey of authentic assessment.

Figure 5. Descriptive statistics for individual elements

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
StandAssmt	71	1	5	3.70	1.303
PrimCar	71	2	5	4.63	.615
Protocol	71	2	5	4.07	.704
PartNum	71	1	5	2.52	1.372
ToolNum	71	1	5	1.54	1.263
EvalSesNum	71	1	5	1.17	.737
UseAuthAssmtwgt	71	1.50	7.50	6.2113	1.37233
NatEnvwgt	71	3.75	6.25	5.8627	.65437
FuncOutwgt	71	4.50	7.50	6.8873	.89919
Artifactswgt	71	1.50	7.50	4.2887	1.52751
LearnStylewgt	71	1.50	7.50	5.3239	1.28757
InterStylewgt	71	2.50	6.25	4.6831	.91413
AssmtTypewgt	71	1.50	7.50	7.1620	1.39329
Culturewgt	71	4.50	7.50	6.7817	.87314
Envltemswgt	71	2.50	6.25	4.9296	.96564
ParInputwgt	71	6.00	7.50	7.4155	.34832
Adaptationswgt	71	3.00	7.50	6.1479	1.39231
Timewgt	71	2.50	6.25	4.7887	1.24975
OtherSourceswgt	71	3.75	6.25	4.8415	1.01175
ClinOpwgt	71	3.00	7.50	5.3451	1.45059
TotalAuthAssWGT	71	4.03	5.96	4.9144	.38833
Valid N (listwise)	71				

Almost 72% of the respondents report that the assessment for eligibility is always conducted in the child's natural environment. This statistic may appear encouraging on the face of it as it indicates that a solid majority of programs utilize the child's natural environment. However, because IDEA mandates that Part C services be delivered in the child's natural environment, it would seem that 100% of the respondents should have reported this as always occurring. There are several possible explanations for why this rate is less than 100%: a program's not considering assessment as a service, thereby exempting it from the natural environment requirement; completing the initial evaluation while the child is still in the hospital in order to begin services as quickly as possible; parent request; or safety concerns.

Sixty-nine percent of the respondents report that they always involve the child's caregiver in the assessment. This rate was also surprising in that a large majority of respondents (84.5%) report using a transdisciplinary assessment style which, according to the definition in the survey, includes the child's family. In addition, 94.4% of the respondents report that they always include information from the child's caregivers in the evaluation process. The discrepancy between this rate and the rate of involvement of the caregiver in the assessment may be explained further by what the respondents consider "information" (interview, questionnaire) and "involvement" (parent present, parent interacting with the child during the evaluation). Some respondents may not consider a parent interview as involvement, but they may consider it as information.

About 39% of the respondents report that they sometimes gather information from child care or medical providers during the evaluation process. About 34% report that

they gather this information most of the time, and about 27% report that they always gather this information. There may be many reasons for these low percentages, including difficulty getting medical records in a timely manner and/or difficulty obtaining input from child care personnel. Sometimes this information may become available *after* the child has already been evaluated for eligibility.

About 65% of survey respondents reported that they always use the information from the eligibility determination process to identify functional outcomes for the child/family. About 30% of respondents reported that it is used most of the time. These results indicate that the information from the eligibility process is not just used to satisfy the eligibility requirements; it is also used to plan the child's/family's services. This is a positive indicator of the use of authentic assessment in that the information obtained from the evaluation serves multiple purposes.

The use of videotape recordings, language samples, and photos are artifacts that are considered part of an authentic assessment. Survey respondents reported that artifacts are not a widely used part of the process for eligibility determination. Only 22.6% of the respondents reported that they use artifacts always or most of the time. There may be many explanations for this including the impracticality of videotaping in the natural environment and the expense involved in purchasing equipment for videotaping.

A majority of the respondents (78.8%) reported that they sometimes or most of the time use the evaluation process to identify the child's preferred learning styles. In addition, 57.7% reported that they sometimes or most of the time use the assessment information to identify the child's preferred interaction style. Because interaction is an

important part of early intervention, this researcher feels that this rate should be higher.

One explanation for why more people did not report always using the evaluation process to identify these styles is that the participants may not realize they are gathering this information since it is not measurable.

Creating a culturally sensitive assessment process was reported as always happening by 56.3% of the respondents. In this researcher's opinion, this rate should be much higher. This result indicates that perhaps more training in cultural diversity may be needed by some programs. This may also indicate that while programs may be showing progress in the use of other elements of authentic assessment, there is still a gap in their knowledge of the contribution of culturally sensitive assessment practices to an authentic assessment.

Over half of the respondents (52.1%) report that most of the time the assessment is conducted using items from the child's environment. Slightly more than half (59.2%) of the respondents report that they strictly follow the test protocol most of the time. Some test protocols require the use of standardized test items and do not allow for substitutions, so one cannot do both—strictly follow the protocol and use items from the child's environment. The responses to these two survey items may require more analysis to find out if any correlation exists, such as whether the program's specific test protocol allows for item substitution or whether staff determining eligibility feel comfortable substituting standardized test kit items with something from the child's environment if they feel it may invalidate the test results.

About 44% of the respondents report that they always make adaptations such as substituting eye gaze for pointing in test administration. This rate may be low because the children being assessed may or may not have a disability requiring such adaptations. In addition, strictly following the test protocol would not allow for adaptations in some instances.

An interesting finding was that almost the same rate of respondents report that the evaluation process takes 46-60 minutes (38%) as 76-90 minutes (35.2%). It would seem that when working with young children, shorter evaluation times would be better tolerated by the child, so a process that takes over one hour may be counterproductive. Most of the respondents (73%) report that only one evaluation session is used to determine eligibility. This may account for the length of the evaluation session—one longer session versus multiple shorter sessions. When trying to meet the federal 45-day timeline from date of referral to date of IFSP, it may not be feasible to attempt multiple evaluation sessions in multiple settings within that time constraint.

Almost half of the respondents (48%) report that three people typically participate in the evaluation process. This question caused some confusion among the respondents and generated the most comments. Some of the respondents were unclear of what was meant by "people," as it might mean staff, parents, or other caregivers. No respondents reported only one person participating which is in line with the law which specifies that a multidisciplinary evaluation take place.

Informed clinical opinion was reported as sometimes being used by about 51% of the respondents. This is alarming to this researcher as it would seem that informed

clinical opinion would *always* be a part of the eligibility determination process. The way this question was worded seems to make it clear that it is not asking if informed clinical opinion is used *to determine eligibility*, but as *part of the process*; however, respondents may have misunderstood what was meant by the question. Shackelford (2002) directly addresses the use of informed clinical opinion. She states that the law's inclusion of this is a safeguard against relying on isolated information or test scores alone.

Eighteen respondents provided additional comments to the survey. These comments provided clarification for some of the responses. The majority of the comments had to do with the number of participants involved in the eligibility determination. Most respondents wanted to clarify that the number of participants was two professionals and the parent at a minimum.

Hypothesis 3—There is a link between lead agency philosophy and the use of authentic assessment. To determine if there was a statistical significance among the agencies' ratings, a one-way analysis of variance (ANOVA) was conducted comparing those programs whose lead agency is the Department of Education to all other lead agencies (Department of Health, Department of Mental Health, Department of Rehabilitative Services, and other agencies). In addition, Tukey's posttest was run to find out if any of the means were significantly different from one another. Figure 4 shows that the difference among the means was not statistically significant at the .05 level (F = .173, df = 4). In fact agencies other than the Department of Education had slightly higher authentic assessment ratings but these were not statistically significant.

Figure 6

## **ANOVA**

## TotalAuthAssWGT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.110	4	.027	.173	.951
Within Groups	10.446	66	.158		
Total	10.556	70			

Figure 7. Tukey's test for multiple comparisons

## **Multiple Comparisons**

TotalAuthAssWGT

Tukey HSD

Tukey HSD						
	-				95% Confide	ence Interval
(I) LeadAgency	(J) LeadAgency	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	11945	.17264	.958	6036	.3648
	3	01378	.27454	1.000	7838	.7562
	4	04887	.16874	.998	5221	.4244
	5	07299	.18921	.995	6037	.4577
2	1	.11945	.17264	.958	3648	.6036
	3	.10566	.24486	.993	5811	.7924
	4	.07057	.11427	.972	2499	.3910
	5	.04645	.14277	.998	3540	.4469
3	1	.01378	.27454	1.000	7562	.7838
	2	10566	.24486	.993	7924	.5811
	4	03509	.24212	1.000	7141	.6440
	5	05921	.25681	.999	7795	.6610
4	1	.04887	.16874	.998	4244	.5221
	2	07057	.11427	.972	3910	.2499
	3	.03509	.24212	1.000	6440	.7141
	5	02412	.13803	1.000	4112	.3630
5	1	.07299	.18921	.995	4577	.6037
	2	04645	.14277	.998	4469	.3540
	3	.05921	.25681	.999	6610	.7795
	4	.02412	.13803	1.000	3630	.4112

# **Summary**

Table 3 summarizes the positive, negative, and neutral indicators of authentic assessment usage based on these survey results.

Table 3

Positive, Negative, and Neutral Indicators

Positive Indicators	Neutral Indicators	Negative Indicators
Use of AEPS (curriculum- based assessment)	65% always use eligibility info. to identify outcomes	Less than 40% report always using authentic assessment
Use of transdisciplinary assessment	About 80% use eligibility information to identify child's learning styles most of the time	Less than 70% caregiver involvement
Information from caregivers included in eligibility determination		Less than 25% use artifacts
65% use eligibility determination info. to identify outcomes		Less than 60% are always culturally sensitive
		Less than 45% make adaptations for children with disabilities

## **Chapter 5—Conclusions and Discussion**

#### Introduction

A survey invitation was sent to the Part C Coordinators across the United States and its territories in order to determine the use of authentic assessment to determine eligibility for early intervention services. Seventy-one responses to this survey were received. These responses seem to indicate that authentic assessment is not used on a widespread basis, but elements of authentic assessment are being used by some programs. There appears to be no link between the program's lead agency and the use of authentic assessment. This chapter will discuss the findings of this study as well as its limitations and implications for future research.

## **Discussion of Findings and Limitations**

It is difficult to extrapolate these survey results to a blanket statement regarding the use of authentic assessment across the United States and its territories because there were so few responses relative to the number of potential respondents. One limitation of this survey design is the snowball effect which will only yield multiple responses if the survey is forwarded. A larger sample would yield more accurate and informative results.

Caution may need to be exercised when trying to interpret the results of this study to making assumptions about actual practice in the field because policy does not always equate to practice as interpretations of policy by practitioners may vary. Also, Part C Coordinators may not be accurate reporters of the actual practices by practitioners in their states.

Of the people who did respond, the use of authentic assessment is encouraging as it appears that some elements are being used. Some states would appear to be slightly better at implementing authentic assessment than others; however, most states/territories just had one respondent. Overall, there was no statistical difference between the states and their use of authentic assessment. More accurate results may be observed in the three states with multiple responses. However, in those three states (Kansas, Indiana, and Texas), a closer look at their responses also yielded no statistical differences among them. While it appears that these states that responded to the survey showed some usage of authentic assessment, no state is using it consistently.

The fact that there was no difference between agencies shows that agency philosophy (educational model versus medical model) has no effect on the usage of authentic assessment. However, it also indicates that authentic assessment is equally underutilized across the country.

Often, the terms "assessment" and "evaluation" are used interchangeably commercially (as in the titling of assessment instruments) and in practice, but the Part C legislation makes a distinction between these two terms. *Evaluation* is used to determine eligibility and *assessment* is used to monitor progress and determine service needs. This researcher feels that although both terms are used in the survey and introductory letter, it is clear that the targeted information is specifically for eligibility determination (evaluation). However, respondents may have confused how the terms are used and responded to the questions with ongoing assessment in mind. Further research into

authentic assessment for eligibility determination may need to more clearly make a distinction between these two terms.

In some instances, bureaucratic red tape or lack of cooperation between agencies may have been a hindrance to having more survey responses. One respondent replied to this researcher's e-mail invitation with a confirmation of completion of the survey. When this researcher asked that respondent to please forward the survey link to early intervention providers (who work for another agency), the respondent said that he did not have those e-mail addresses and thought that the survey may have to pass that agency's Internal Review Board process (personal communication, February, 2010).

## **Implications**

If these survey responses are truly representative of actual practices, it is encouraging that 83.1% of the respondents report using authentic assessment practices always or most of the time. This is a good starting point and establishes a good base for the addition of additional authentic assessment methods. Future research may need to look at a more detailed, perhaps observational record, of actual assessment practices instead of this self-reporting method.

These survey results may indicate a positive trend in the use of authentic assessment; however, the reverse may also be true. Longitudinal studies would show if the use of authentic assessment elements increases or decreases over time.

The increasing cost of providing services may cause some programs to tighten their eligibility requirements. Adopting authentic assessment practices may help in this

regard as a better picture of a child's true functional development would be obtained instead of an arbitrary picture of how a child performs artificial tasks at a certain moment in time. This would ensure that only children who truly need services get them and that services provided to eligible children are effective and meaningful.

#### Suggestions for future research

This research has opened up the possibility for a much closer look at the use of authentic assessment in early childhood intervention. Future research may need to include objective, observational studies of each state's practices for determining eligibility for early intervention. In addition, longitudinal studies to show the increase or decrease of authentic assessment methods over time would be helpful to determining if this is a growing or lessening trend in early intervention.

A replication of this study with multiple respondents from each state would provide a more accurate depiction of actual authentic assessment usage in the United States and its territories. Clarification of some of the elements (i.e., parent involvement versus parent information) might be helpful to survey respondents in more accurately reporting their usage of authentic assessment. A more finely graded survey may provide a more accurate view of each program's strengths and weaknesses regarding the use of authentic assessment.

Each state/territory may want to conduct its own research into their authentic assessment practices. This would provide an opportunity for more intense scrutiny of their eligibility requirements and methods. This, in turn, may lead to more accurate

identification of children who need early intervention services, provide more accurate information for identification of individual child/family outcomes, and provide for more efficient use of staff. Improved assessment methods would improve services overall.

#### **Summary**

This thesis looked at the use of authentic assessment to determine eligibility for early intervention programs across the United States and its territories. This information was reported by Part C Coordinators in response to a survey developed by this researcher. The findings show that authentic assessment is not used on a broad basis, but elements of authentic assessment are used. There was no difference between agencies in the use of authentic assessment.

The unique quality of authentic assessment is that it gives a more accurate picture of a child's development at any given point in time. This uniqueness, in turn, makes authentic assessment a difficult thing to implement in that the federal government requires quantitative information to determine eligibility, but functional outcomes and useful intervention requires qualitative information to be effective.

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# **APPENDICES**

Appendix A

IRB Approval

Ms. Gisele Bryce
Dr. LaDonna Atkins
Department of Human Environmental Science
College of Education and Professional Studies
Campus Box 118
University of Central Oklahoma
Edmond, OK 73034

Dear Ms. Bryce and Dr. Atkins:

#### Re: Application for IRB Review of Research Involving Human Subjects

We have received your revised application (UCO IRB# 09157) entitled, *The use of authentic assessment in eligibility determination for early childhood intervention programs*, and find all major stipulations in order. The UCO Institutional Review Board is pleased to inform you that your IRB application has been approved.

This project is approved for a one year period but please note that any modification to the procedures and/or consent form must be approved prior to its incorporation into the study. A written request is needed to initiate the amendment process. You will be notified in writing prior to the expiration of this approval to determine if a continuing review is needed.

On behalf of the Office of Research & Grants and UCO IRB, I wish you the best of luck with your research project. If our office can be of any further assistance in your pursuit of research, creative & scholarly activities, please do not hesitate to contact us.

Sincerely,

Jill A. Devenport, Ph.D.
Chair, Institutional Review Board
Office of Research & Grants, Academic Affairs
Campus Box 159
University of Central Oklahoma
Edmond, OK 73034
405-974-5479 405-974-2526

JAD/

Appendix B

Survey Cover Letter

January 26, 2010

Dear Part C Coordinator:

I am a graduate student in the Family and Child Studies program at the University of Central Oklahoma in Edmond, Oklahoma. I am currently working on my thesis. The topic of my thesis is assessment practices for eligibility determination for early intervention services. Neisworth and Bagnato (2004) describe authentic assessment as "measurement techniques that capture authentic portraits of the naturally occurring competencies of young exceptional children in everyday settings and routines—the natural developmental ecology for children."

For my research for this topic, I am disseminating surveys to all the Part C Coordinators for the 50 states and U.S. territories and asking them to complete the survey and/or forward the survey to others in the field. The survey questions will cover aspects of your state's assessment practices for early intervention eligibility such as location, participants, types of assessment tools used, etc. Results of the study will be used in writing my graduate thesis and may be published and/or archived. Raw data will be stored in a locked, secured cabinet for a period not to exceed five years after which time it will be destroyed. Electronic information will be password protected. Your participation is voluntary, and all survey responses will remain anonymous as to the person who actually completed the survey; however, survey results will be identifiable by state/territory. It is important to the reliability of the results that information from all states is included, so your participation is extremely important to providing accurate results. There will be no direct compensation/benefits to you as a participant, but it is felt that the information you provide may be beneficial to the early intervention field in general. Would you mind helping me in my research by completing the survey and/or forwarding it on to others in the field of early intervention?

This survey should take 10-15 minutes of your time. To participate in the study, please go to the following website:

https://www.surveymonkey.com/s/XQ5ZQ9F

The survey link will be active until midnight on February 13, 2010.

Thank you for your assistance in this research project.

Sincerely, Gisele Bryce

# Appendix C

Authentic Assessment Survey Questions

# Authentic Assessment Survey Questions

SURVEY QUESTION	POSSIBLE RESPONSES
1. What is your age?	21-30 31-40 41-50 51-60 61 or over
2. What is your gender?	M F
3. What is your race?	African American Asian Caucasian Hispanic/Latino Native American Other (please specify)
4. Part C Program Name	X 1 V/
5. In which state/territory is your program located?	[All 50 states listed as well as American Samoa, Bureau of Indian Education, Dept. of Defense, District of Columbia, Guam, Northern Mariana Islands, Palau, & Virgin Islands.]
6. Who is the lead agency for your program?	Dept. of Education Dept. of Health Dept. of Mental Health Dept. of Rehab. Services Other (please specify)
7. Which agency's personnel are involved in eligibility determination? (Check all that apply.)	Dept. of Education Dept. of Health Dept. of Mental Health Dept. of Rehab. Services Other (please specify)
8. Which agency's personnel are involved in determining service needs/developing the IFSP? (Check all that apply.)	Dept. of Education Dept. of Health Dept. of Mental Health Dept. of Rehab. Services Other (please specify)
9. Which agency's personnel deliver services to eligible children/families? (Check all that apply.)	Dept. of Education Dept. of Health Dept. of Mental Health Dept. of Rehab. Services Other (please specify)

10. Neisworth and Bagnato (2004) describe authentic assessment as "measurement techniques that capture authentic portraits of the naturally occurring competencies of young exceptional children in everyday settings and routines—the natural developmental ecology for children" (p. 198). Our intervention program uses authentic assessment to determine eligibility for services.	Never Rarely Sometimes Most of the time Always
11. A standardized assessment instrument is used for eligibility determination.	Never Rarely Sometimes Most of the time Always
12. The assessment for eligibility is conducted in the child's natural environment.	Never Rarely Sometimes Most of the time Always
13. The child's primary caregiver is involved in eligibility determination.	Never Rarely Sometimes Most of the time Always
14. The information obtained from the eligibility determination process helps identify functional outcomes for the child and/or family.	Never Rarely Sometimes Most of the time Always
15. Artifacts (language samples, work samples, photos, videotape) are gathered as part of the eligibility determination process.	Never Rarely Sometimes Most of the time Always
16. The information obtained from the evaluation process helps identify the child's preferred learning styles.	Never Rarely Sometimes Most of the time Always

17. The information obtained from the evaluation process helps identify the child's preferred interaction style.	Never Rarely Sometimes Most of the time Always
18. What type of assessment does your team conduct?	Interdisciplinary (Each professional functions in his/her prescribed role and the group meets to exchange information, discuss possible causes of delay, and prescribe interventions based on group consensus.)
	Multidisciplinary (Assessment is discipline-specific and each professional generates a separate report.)
	Transdisciplinary (The child is assess simultaneously by multiple professionals representing varying disciplines. The child's family is a part of the assessment team. An integrated report of assessment results is generated.)
19. Efforts are made to make the	Never
assessment process culturally	Rarely
sensitive (use of interpreters,	Sometimes
respecting cultural taboos, etc.).	Most of the time
	Always
20. The assessment is conducted using	Never
items from the child's environment	Rarely
(child's toys, household objects,	Sometimes
etc.).	Most of the time
	Always
01 771-4-4 1 1 1 1 1	i ·
21. The test protocol is strictly	Never
21. The test protocol is strictly followed.	Never Rarely
	Never Rarely Sometimes
	Never Rarely Sometimes Most of the time
followed.	Never Rarely Sometimes Most of the time Always
followed.  22. The evaluation process includes	Never Rarely Sometimes Most of the time Always Never
followed.  22. The evaluation process includes information from the child's	Never Rarely Sometimes Most of the time Always Never Rarely
followed.  22. The evaluation process includes	Never Rarely Sometimes Most of the time Always Never Rarely Sometimes
followed.  22. The evaluation process includes information from the child's	Never Rarely Sometimes Most of the time Always Never Rarely Sometimes Most of the time
followed.  22. The evaluation process includes information from the child's	Never Rarely Sometimes Most of the time Always Never Rarely Sometimes

23. Adaptations are made in the test	Never
administration to account for	Rarely
individual child differences or	Sometimes
atypical response patterns (i.e.,	Most of the time
substituting eye gaze for pointing).	Always
24. The evaluation process takes:	Under 30 minutes
	30-45 minutes
	46-60 minutes
	61-75 minutes
	76-90 minutes
25. The evaluation process includes	Never
information from other sources	Rarely
such as child care providers or	Sometimes
medical providers.	Most of the time
	Always
26. How many people typically	1
participate in the evaluation	2
process?	3
_	4 or more
27. Informed clinical opinion is used in	Never
the eligibility determination	Rarely
process.	Sometimes
	Most of the time
	Always
28. How many assessment tools are	1
used for eligibility determination?	2
	3
	4 or more
29. How many evaluation sessions are	1
used to determine eligibility?	2
	3
	4 or more
30. Please provide any additional	
comments to clarify your state's	
eligibility determination process.	

# Appendix D

Protecting Human Research Participants Certificate of Completion

# **Certificate of Completion**

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Gisele Bryce** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 11/17/2009

Certification Number: 339681

Appendix E

Item Weighting Explanation

#### Weighted Items and Rationales

UseAuthAssmt = 1.5	It was thought that the respondent's own opinion of their use of
	authentic assessment was critical to their actual use of it.

- StandAssmt = 1.1 The literature shows that the use of a standardized assessment instrument does not necessarily contribute to an authentic assessment.
- NatEnv = 1.25 While an assessment in the natural environment is considered authentic, services in the natural environment are mandated by IDEA. It was thought that this mandate would decrease the impact of this item on authentic assessment.
- PrimCar = 1.1 It was thought that the wording of this question might have been confusing to the respondents as each person's interpretation of "involvement" might vary. For one person it might mean just being in the room with the child and for another it might mean actually administering assessment items.
- FuncOut = 1.5 An authentic assessment serves multiple purposes.
- Artifacts = 1.5 The literature supports the gathering of artifacts as an essential component of authentic assessment.
- LearnStyle = 1.5 Determination of a child's learning style will contribute greatly to the selection of effective interventions.
- InterStyle = 1.25 While this is important to learn during assessment, it was felt that respondents may not have had a clear understanding of what this was.
- AssmtType = 1.5 The literature shows that a transdisciplinary assessment is considered to be most authentic.
- Culture = 1.5 The literature shows that authentic assessments are culturally sensitive.
- EnvItems = 1.25 The use of items from the child's environment (familiar items) would make the assessment more authentic, but many test protocols do not allow for substitution of items.

Protocol = 1.1 While standardized assessments are frequently used, deviance from the protocol may or may not be allowed.

ParInput = 1.5 Input from parents is considered vital to an authentic assessment.

Adaptations = 1.5 Making adaptations for children with disabilities is vital to authentic assessment.

Time = 1.25 While it could be argued that a shorter assessment would be better tolerated by the child, it could also be argued that a longer assessment would garner more information regarding a child's functional abilities.

OtherSources = 1.25 Information from other sources such as the child's physician and caregivers is useful to an authentic assessment but not considered vital.

PartNum = 1.1 This question elicited the most comments from respondents. They were unclear who should be included in this number. Staff only? Child? Parents?

ClinOp = 1.5 Clinical opinion is a vital part of the assessment process and is specifically mentioned in IDEA as a safeguard against relying on standardized assessment instruments alone.

ToolNum = 1.1 Using more assessment instruments is not necessarily better, especially if the instruments are standardized.

EvalSesNum = 1.1 While it could be argued more evaluation sessions might give a better picture of the child's functional abilities, it could also be argued that more evaluation sessions would be more stressful on the child/family.