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A Worthy Challenge: Assessing Child Developmental Growth in a Systematic Manner

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Let's suppose . . . on a snowy afternoon in Minneapolis, two elderly gentlemen scholars have arrived at a local Starbucks to talk about a very important issue: How do you assess developmental and learning outcomes for children across the early childhood years? As they take their coffee and juice, respectively, to their table, both are perplexed by the task at hand. They each had generated great knowledge about child development and learning during their careers and people have used their work to produce valuable assessment tools and strategies. The first gentleman, Arnold Gesell (1949), had mapped child development for infants and preschool children, and his methodological descendents in early childhood education and special education, such as Sanford, Brigance, Furno and colleagues, Bricker, and Newborg and colleagues, had used his and other's work to design useful assessments of early development. The second gentleman, Ogden Lindsley (who graciously gave permission for me to use his persona in this scenario), had established an approach to precise measurement of behavior that allowed systematic and ongoing assessment of learning (Lindsley, 1972; 1992). Others, such as White, Haring, Cooper, Deno, and Fuchs, had adapted this approach to assess and monitor the changes in students' (primarily academic) learning that resulted from instruction and to make modifications in instruction when learning did not occur. With the first sip of their beverages, a lively exchange began between these two historic figures.

If these two pioneers would have had an afternoon to discuss this issue, they might very well have proposed an ambitious project like that undertaken by the investigators of the Early Childhood Research Institute on Measuring Growth and Development. In the feature article, Priest and colleagues (2002) described the first steps in this project. Basing their overall mission on the fundamental goal that all children will start school ready to learn, they plan to design a process (and eventually a tool for the field) for assessing children's developmental progress. Such a tool would be multifaceted in that it would measure the typical development of children, identify delays in developmental progress when they occurred, and sensitively assess changes in developmental growth that result from instruction or intervention. As they noted, it would be parsimonious, which could help practitioners use the assessment in their classroom and convey meaningful information to parents. This sounds like just the kind of thing we need in the field.

The Priest et al. paper allows us a glimpse of how these investigators began developing their instruments from the rationale, to the selection of items, and the analysis of social validity. The challenges were monumental. How does one select a relatively small number of indicators that would gauge development across the first 8 years of life? Their choice of focusing on function of behavior rather than form, when possible, was a wise one, yet we know that even function within develop-

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mental domains changes across the early
childhood years, which makes the task harder.
Despite these challenges, this research team
appeared to follow systematic methods in
identifying 15 growth outcome indicators.
This process was well described in Study 1,
and in Study 2, the investigators stepped
outside their research group to establish the social
validity of the outcomes they had identified.
Using informed practitioners and parents was
a logical and important next step in this pro-
gram of research.

With every ambitious, worthwhile goal and
subsequent project, concerns will arise. The
theoretical diversity in the field of early in-
tervention and early childhood special education
will generate criticism of almost any position.
For example, with this project, one criticism
may be that it is atheoretical. The measure-
ment of outcomes is not based on a theory of
how children develop or learn. If we view Ge-
sell as a developmental geographer and Lin-
dsley as an atheoretical but pragmatic mea-
surer of behavior, to some extent this criticism
is valid. One would assume that the final as-
sessment instruments will be based on mea-
surement theory, in which the reliability and
validity of the assessment approach is rigoro-
usly documented, even though this was not
discussed in the article. Importantly, as a mea-
surement instrument, the projected tool should
be compatible with different approaches to in-
struction. For example, the assessment instru-
ments will not be based on a Piagetian theory
of child development but should still be useful
for assessing outcomes of children receiving
the High Scope curriculum.

In this initial article, it is unclear what form
the assessment will take—that is, how the out-
comes will be operationalized. My sense is
that the final assessment tasks will be de-
signed to assess *general* indicators of devel-
opment, just as in a precision-teaching or cur-
riculum-based measurement system the num-
ber of computational addition problems cal-
culated correctly in a specific time might
assess general math skills. A danger will exist,
as it does with any assessment, if practitioners
actually embed the operationalized tasks in
their curriculum without provisions for gen-

eralization. Without knowing the operational-
ized tasks, it is impossible to give a specific
example from the proposed assessment.

An issue that could haunt this project is re-
lated to the sample of respondents who as-
sessed the importance of outcomes. The au-
thors noted that the majority of respondents
were white/Caucasian (92–93%), well-educat-
ed (93% above high school level), and female
(79–90%). A theme for the last quarter cen-
tury has been the emerging cultural diversity
in young children with disabilities and their
families in this country. It is possible that dif-
ferent cultural groups may have had different
perspectives on the importance of specific de-
velopmental outcome indicators. When they
saw that their sampling technique was not suc-
cessful in representing perspectives of Afri-
can-American, Asian-Pacific Islanders, Lati-
nos/Hispanics, or Native Americans, it might
have been possible to convene focus groups
of individuals with these cultural heritages to
review the outcome indicators, just to ensure
that the investigators were on the right track.
In fact, it might not be too late to gather such
information. From their previous work, it is
clear that the authors of this paper understand
and value the importance of cultural diversity,
and in the subsequent work that establishes
the reliability, validity, and utility of this as-
sessment approach, I predict that culturally di-
verse groups will be well represented.

The investigators in this project have estab-
lished a challenging task for themselves. They
have made the strong case that individual as-
sessment of clearly defined developmental
outcomes is critically important, provided a
persuasive rationale for their approach to
identifying outcomes, and assessed the social
validity of the outcomes. It is now time to
fulfill the promise of their program of re-
search. To date, reports on the operationali-
zation of indicators have only appeared in in-
vited publications and technical reports. The
important and convincing next step will be to
provide public and empirical demonstrations
(i.e., in peer reviewed journals) of the opera-
tionalization of outcome indicators, the reli-
ability and validity of the assessment ap-
proaches, the feasibility and acceptability of

the assessment administration, and the utility in gauging development and learning and monitoring changes resulting from intervention. It is a huge task, but certainly one of the worthy challenges in the field.

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