BAS3: Use of modified administration procedures when evaluating children with special educational needs.

The BAS3 and its predecessors were developed over a forty-year period. The primary aim of that development was to produce an instrument for evaluating cognitive abilities that would be accessible and appealing to children with special educational needs. This is reflected in the wide range of test materials that are available, the provision of plenty of teaching items and procedures for each scale, and low floors on nearly all scales. The expression “low floors” means that there are plenty of easy items. Thus, if a child has low ability in a particular area, there are usually a number of items that she or he can understand and respond to appropriately.

The overlap between the Early Years and School-Age batteries of the BAS3 is also aimed at helping in the assessment of children with special educational needs. Using this feature, a school-aged child aged between 6 years 0 months and 7 years 11 months can be evaluated using materials from the Early Years battery if these are likely to be developmentally more appropriate. Of course, the Early Years materials also have much lower floors for 6- and 7-year-old children.

Modification of administration procedures.
In standardising a test battery such as the BAS3 on a representative sample of the population of children, it is impossible to take account of the full range of diversity in children’s abilities and behaviours. We do our best to develop procedures that will apply satisfactorily to the vast majority. However, there will always be a small number of children with multiple disabilities, perhaps including behavioral issues such as inattention, lack of cooperation, or avoidance behaviors, that require some additional accommodations in test administration procedures.

Accommodations and modifications to standard test procedures may take the form of modified teaching instructions, procedures to maintain attention such as using additional praise and other reinforcers, and allowing the child to have breaks if necessary. If accommodations of these kinds have been used, they should be reported in the score report. They may have resulted in some elevation in the child’s scores on the battery and the results should therefore be interpreted with caution.

We should note that extra modifications to administration instructions may, in fact, increase the validity of results. For example, let us
suppose a child fails to respond and obtain a score above zero on a particular scale, given the standard administration. Then the scale is given with additional reinforcers—perhaps lots of praise, clapping, and high fives! The child then focuses on the materials and gets a number of items correct. We can hardly say that the administration with a zero raw score is valid, because we had no sample of behavior to assess. However, given much praise and encouragement, the child is able to respond at a particular level. This gives us information that, given such conditions for learning, the child is capable of understanding this type of task.

Unacceptable modifications.
Standardised procedures, such as Sample items and Teaching items, are provided in the BAS3 in order to help children who are uncertain or lacking in confidence to understand the nature of the task. On a number of scales, Teaching Items enable you to provide correct answers for the child after he or she has made an incorrect response. However, in the standard procedure, you should not provide correct answers to items beyond those specified for teaching, nor should you coach the child on how to solve the problems on later items. You may wish to test limits and investigate whether (for example), if you supply correct answers, this will help the child to become more confident and thus have a better chance of getting later items correct. In such a case, you should administer and score the scale using standard procedures first. After this, it is permissible to repeat the test using your chosen modification. This would enable you to compare scores using the standard and modified procedure. Once again, if this is to be reported, your modification should be clearly described.

Reporting and Interpretation.
If you have employed certain accommodations and modifications, these should be clearly described in your score report. This should also indicate the threats to the interpretation of the scores posed by the changes in procedure. Even when administered in standard fashion, test scores always are subject to error of estimate, so inserting an additional modification in procedure may increase the band of uncertainty surrounding a score, but does not necessarily invalidate it.

In the author’s opinion, there is no justification for failing to report test scores administered in slightly modified ways. To do so would mean throwing away information that might be important in understanding the child’s cognitive processing. We have progressed beyond the days when individuals were labeled as “untestable.” Test scores, as always, should be compared with other data on the child, including
observations, ratings, consultation and performance measures. The
questions that should always be asked are:

- Do these test results shed light on the child’s cognitive processing
  and how the child learns?
- Did the modifications in administration procedures enable the child to
  perform optimally, and do the scores need to be interpreted with
  extra caution?
- Are the test results consistent with teachers’ and parents’
  observations of the child’s learning and behavior?
- Do they help us develop hypotheses about how to teach the child,
  and about the most appropriate learning environment?

The BAS3 is designed to help us in the cognitive evaluation of
unusual children with special educational needs. Any and all
evaluations of such children are by their very nature subject to
uncertainty. We should not expect unrealistic precision in
measurement, but rather we should hope and expect that test results
will give us better understanding of the child’s cognitive processing. In
its turn, this should guide us in determining what the next steps
should be in providing for the child’s educational needs.