Experiencing RAN:
Notes from a speech-language pathologist

Ros Neilson provides a clinical footnote to the information provided about research on RAN, writing from the point of view of a speech-language pathologist.

Reading specialists and psychologists who are not familiar with Rapid Automatized Naming, may at first glance query its relevance to their day to day practice, beyond providing a screening tool. The research, after all, shows that RAN does not provide a useful target for direct intervention with clients (see Norton, 2020, this Bulletin.)

Speech-Language Pathologists (SLPs) who have seen RAN in practice, however, tend to take a different point of view. RAN can be very revealing indeed. RAN was introduced into SLP clinical practice in the third edition of an important oral language test, the CELF-3 (Semel, Wiig & Secord, 1995, out of print). The current CELF-5 no longer includes the RAN subtest, so SLPs have to turn to other tools to do the assessment.

There were three RAN tasks provided within the optional subtests of the CELF-3: colour naming, shape naming (both of which are traditional RAN tasks), and finally a non-traditional and very complex RAN-type task, colour + shape naming. The colour + shape array is reproduced in Figure 1. The student has to say, as rapidly as possible, "Green circle, green triangle, blue star ... etc." until the end of the array is reached. Readers may wish to try out the task for themselves.

Some students with reading difficulties who have generally at least low-average oral language and IQ scores, find the colour + shape naming task startlingly difficult. Time taken to complete the array is not the only issue by any means - the qualitative observations that the task allows are invaluable. Some students lose the order of the phrase syntax at times, switching to, for example, "triangle yellow" instead of "yellow triangle" midway through the array. Some inconsistently lose their control of articulation, stumbling and struggling with the consonant clusters in 'square', 'star', 'triangle and 'green'. Some show extremely strong word interference, saying, for example, "red, no, blue, no yellow square." And the less compliant students often simply stop and say, "I can't do it."

What SLPs are seeing, in the clinic, is language difficulty under the microscope. The phonological, semantic and even syntactic routes by which these students produce language are vulnerable when it comes to a task that involves a closed set of items to be identified, time pressure, a lot of executive coordination, as well as overall speed of processing. All these factors, of course, are obviously involved in reading — and reading, moreover, also involves the extra dimension of use of the alphabetic code.

I have not seen published research confirming this, but I suggest that the language difficulties highlighted in RAN assessment may also be involved to a less obvious extent in spoken language. There are many students with reading difficulties whose oral language sounds unremarkable when they are chatting casually, but who still struggle to produce formal language on demand. Their sentences get lost in mazes, they keep coming up with the wrong words, and their pronunciation of tongue-twister type words is very fuzzy.

As a SLP, I strongly endorse the suggestion made by Elizabeth Norton (Norton, 2020, this Bulletin) that RAN assessment can act as a diagnostic warning light. Students who have reading difficulties associated with weakness on RAN are at risk of being seen as merely slow learners, lazy, or not trying hard enough, and their oral language may make them even more vulnerable to such labels. Evidence from RAN assessment can be a part of an important advocacy role for those working to support these students, and the observations that RAN affords can help to shape the oral and written language targets chosen for intervention.

Semel, E., Wiig, E.H., & Secord, W. A. (1995). *The Clinical Evaluation of Language Fundamentals, Third Edition*. The Psychological Corporation. (Out of print)
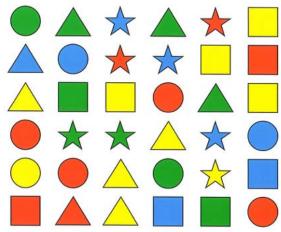
Figure 1: Coloured shape RAN task, reproduced from the *CELF-3* (now out of print).