Convergent models of blended assessment of dyslexia

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Introduction

In the vocational and training colleges of South Africa, whilst identification of dyslexia is required, implementation is, at best, highly problematic. As highlighted by Smythe (2015) there are many confounding factors, in particular multilingualism and poor education. As a consequence, standard models that work elsewhere would not work in SA. At Western College an alternative approach is being tried, which combines diverse models of computerised and human assessment to produce not a categorical diagnostic but what may be referred to a probability based support system.

Defining dyslexia

Dyslexia is usually defined as

… a difficulty in the acquisition of fluent and accurate reading and writing skills.

The key part is "acquisition". If the individual has not had the opportunity to acquire the necessary language skills, it would be impossible to diagnose dyslexia. By putting them into an environment (e.g. at college) whereby they have that opportunity, it would be possible to track progress over time, and only then suggest if they are dyslexic.

The problem with this approach is that it takes time and resources which are rarely available in reality. For this reason, we used the dyslexia component of a self-assessment SpLD questionnaire, combined with results from multiple literacy tasks, both of which were administered by the online assessment tool, Profiler.

Methodology

The initial triage using the questionnaire identified 232 individuals who had moderate or severe difficulties (Bands 1+2 of the questionnaire). A form of confirmatory analysis used the following five literacy test:

    Reading Vocab
             Word Choice
             Cloze
             Comprehension
    Spelling

In this simple analysis, a count was made of the number of occasions when the individual scored badly (Band 1 – bottom 10%) in a given test. Results are shown in Table 1.Those given the highest priority (Group 1) where those who were both SpLD Band 1/2 and three or more Band 1 literacy scores.

		Self Assessed SpLD (Bands)				
		1	2	3	4	Total
Number of Band 1 Literacy Scores	5	3	8	8	6	25
	4	8	25	30	55	118
	3	12	20	50	99	181
	2	4	28	101	251	384
	1	8	47	192	910	1157
	0	13	56	179	1152	1400
Total		48	184	560	2473	3265

Table 1: Literacy difficulties and SpLD

The table plots the number of individuals with poor literacy scores against their self-assessment Band. That is, 12 individuals self-assessed as SpLD Band 1 and also had three literacy results in Band 1, the lowest category. Colours represent priority grouping, red being Group 1. Total in this (red) group was 76, or 2.3% of students tested.

	All	% All	Poor SS	Good SS
Group 1	76	2.3	40	36
Group 2	156	4.8	74	82
Group 3	250	7.7	82	168
Group 4	2783	85.2	540	2243
Total	3265	100.0	736	2529

Table 2: Priority grouping split by study skills (SS) scores.

The most severe students – those in Group 1(Red Group) – were subdivided for intervention into Poor and Good, to provide a priority basis.

The next phase

This methodology provides an evidence basis for determining who receives support. Whilst it may not fulfil pure diagnostic criteria that will release additional funding, it does create a workable methodology for identifying and supporting those in need of literacy support. By utilising this blended assessment approach, it is possible to be reasonably certain of the results. However, further data may be made available to ensure the results are robust, including socio-economic data, also collected on Profiler.

Reference

Smythe I (2015) Establishing a blended assessment of dyslexia in South Africa. Journal of Inclusive Practice in Further and Higher Education. Vol 6, p48-57. Online Access: Dotr.im/nadpSmythe2015

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