

Differentiation: deep analysis pinpoints individual learning needs

Alec Young

Enrolment Number	Student		Raw Score	%
627301	Zeeland	Abergail	8.0	17.8%
627304	Williams	Douglas	8.0	17.8%
627320	Garden	Tom	9.0	20.0%
627327	Raspberry	Alec	9.0	20.0%
637311	Pear	Kellie	11.0	24.4%
627317	Juice	Queenie	12.0	26.7%
627319	Hunter	Sally	12.0	26.7%
627314	Mango	Neil	15.0	33.3%
627315	Lime	October	15.0	33.3%
627325	Berry	Yvette	16.0	35.6%
627308	Smith	Harry	17.0	37.8%
627306	Udress	Fred	18.0	40.0%
627321	Fig	Ursula	18.0	40.0%
627329	Apricot	Charlie	18.0	40.0%
627309	Roland	Irene	21.0	46.7%
627316	King	Paul	21.0	46.7%
627310	Quince	Jack	24.0	53.3%
627313	Nolan	Margaret	25.0	55.6%
627328	Blueberry	Bronwin	25.0	55.6%
627302	Yoland	Barnaby	26.0	57.8%
627303	Xee	Christine	28.0	62.2%
627323	Douglas	Willamena	28.0	62.2%
627324	Cherry	Xan	28.0	62.2%
627322	Eggplant	Victor	33.0	73.3%
627312	Orchard	Laurie	35.0	77.8%
627318	Island	Ross	38.0	84.4%
627305	Vince	Elaine		
627307	Thomson	Gailene		
627326	Apple	Zorro		
627330	Peach	Debbie		
		Average	19.9	44.27%

Figure 1

Many articles have been written on the merits of differentiation. Most are based on the assumption teachers can identify the learning needs of students based on the results of a test. To do this the teacher sorts the students, based on their results; Reference Figure 1. This shows a blanket achievement with no indication of students' achievement across a range of strands of learning.

If it was a comprehension assessment, the teacher could use strands such as:

- Retrieving directly stated information
- Reflecting on text
- Interpreting explicit information
- Interpreting by making inferences
- Similarly if it was a numeracy assessment, the strands could be:
- 3D interpretation

AutoMarque		Learning Needs Analysis	
Test: Grade 7 Numeracy Bench Mark Test			
Strand: Problem Solving			
	Class	Date set	Percent correct
Abergail Zeeland	Grade 7 A - Young	18-Aug-12	0.0
Douglas Williams	Grade 7 A - Young	18-Aug-12	0.0
Kellie Pear	Grade 7 A - Young	18-Aug-12	10.0
October Lime	Grade 7 A - Young	18-Aug-12	10.0
Sally Hunter	Grade 7 A - Young	18-Aug-12	10.0
Tom Garden	Grade 7 A - Young	18-Aug-12	10.0
Queenie Juice	Grade 7 A - Young	18-Aug-12	20.0
Yvette Berry	Grade 7 A - Young	18-Aug-12	20.0
Fred Udress	Grade 7 A - Young	18-Aug-12	30.0
Neil Mango	Grade 7 A - Young	18-Aug-12	30.0
Paul King	Grade 7 A - Young	18-Aug-12	30.0
Alec Raspberry	Grade 7 A - Young	18-Aug-12	30.0
Bronwin Blueberry	Grade 7 A - Young	18-Aug-12	30.0
Harry Smith	Grade 7 A - Young	18-Aug-12	40.0
Irene Roland	Grade 7 A - Young	18-Aug-12	40.0
Ursula Fig	Grade 7 A - Young	18-Aug-12	40.0
Charlie Apricot	Grade 7 A - Young	18-Aug-12	40.0
Margaret Nolan	Grade 7 A - Young	18-Aug-12	50.0
Barnaby Yoland	Grade 7 A - Young	18-Aug-12	60.0
Jack Quince	Grade 7 A - Young	18-Aug-12	60.0
Willamena Douglas	Grade 7 A - Young	18-Aug-12	60.0
Christine Xee	Grade 7 A - Young	18-Aug-12	70.0
Victor Eggplant	Grade 7 A - Young	18-Aug-12	70.0
Xan Cherry	Grade 7 A - Young	18-Aug-12	70.0
Laurie Orchard	Grade 7 A - Young	18-Aug-12	90.0
Ross Island	Grade 7 A - Young	18-Aug-12	100.0

Figure 2

- Problem solving
- Area
- Chance & Data
- Fractions

Bearing in mind Masters' assertion that in any teaching group of students there can be a spread of as much as six years (Masters 2013, *Reforming Educational Assessment* p. 13), it is essential that teachers are able to quickly identify students' strengths and weaknesses in a particular strand of learning. The solution to obtaining progress when addressing this problem is transformed from the vagueness of Figure 1 to clarity when using AutoMarque's 'Learning Needs Analysis', as seen in Figure 2.

By clicking on the 'Learning Needs Analysis' icon in AutoMarque, the teacher is asked to identify the strand that is to be analysed. AutoMarque then automatically ranks the students in a specified strand of learning from the least to the most successful. Based on this list, the teacher is far more likely to be able to group students according to their learning needs enabling effective intervention through differentiated teaching.

It is through such effective diagnostic intervention that teachers are seen to be proactive and leaders in their profession as they improve the learning outcomes of all students.

ET

Research and share

Education Today issues from Term 3 2015 Vol 15 (3) to Term 4 October 2007 Vol 7 (4) are online at www.educationtoday.com.au

FROM CONCEPT...

...TO COMPLETION

**THE EXPERTS IN EDUCATION FURNITURE
DESIGN, SUPPLY & INSTALLATION**

P: 1800 228 877

E: enquiries@civicaustralia.com.au

W: civicaustralia.com.au



CIVIC
ACADEMIA