Cure MathDislike: BundleCount before you Add

1Day Skype Seminar on BundleCounting, ReCounting & BundleWriting

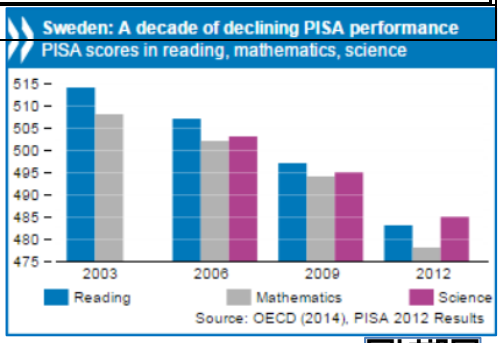
Action Learning on the child's own 2D NumberLanguage as observed when holding 4 fingers together 2 by 2 makes a 3-year-old child say 'No, that is not 4, that is 2 2s.'

Teaching and researching 2D 'Arabic' Numbers as 1D 'Roman' Numbers may create MathDislike.

09-11	***Listening and Discussing*: Curing Math Dislike, a PowerPointPresentation** To master Many, we Math?? No, first we Count, then we Add. Math is a label, not an action word.
	1. The problems of **Modern** MatheMatics, or **MetaMatism** **2.** The potentials of **PostModern** MatheMatics, or **ManyMath** **3.** The Difference between **MetaMatism** and **ManyMath** **4.** A ManyMath **Curriculum** for Primary and Middle and High school **5.** Theoretical aspects, and **6.** Where to learn about ManyMath? **Bad Math**: *MatheMatism*, true inside but rarely outside classes: 2+3 IS 5, but 2weeks+3days = 17d? Adding 1D Line Numbers without units may create MathDislike. **Evil Math**: *MetaMatics*, presenting a concept TopDown as an example of an abstraction instead of BottomUp as an abstraction from many examples: A function IS an example of a set-product. **Good Math**: *ManyMatics*, a natural science about Many mastering Many by BundleCounting, ReCounting & BundleWriting: T = 5 = I I I I I = II I I I = 1B3 2s = II II I = 2B1 2s = II II II I = 3B-1 2s.
11-13	Skype Conference. Lunch
13-15	***Doing*: Trying out the BundleCount 'fore you Add** booklet to see proportionality and calculus and solving equations as golden LearningOpportunities in Bundle- & Re-Counting and NextTo Addition.
	RECOUNTING, in the same unit creates over- or under-load, in a new unit creates *proportionality* **Question**: T = 2.1 3s = ? 3s. **Answer**: T = 2.1 = 2B1 = 1B4 = 3B-2 3s **Q**: T = 2 3s = ? 4s **A**: T = 2 3s = III III = IIII II = 1B2 4s = 1B1 5s = 3B 2s = 1BB1B 2s = 11.0 2s
	CalculatorPrediction. **Q**: T = 2 4s = ? 5s. **A**: T = 1.3 5s since *RecountFormula* **T = (T/B)*B** says 'From T, T/B times, Bs can be taken away'
	RECOUNTING in and from Tens resizes blocks meaning teaching *multiplication before addition*: **Q**: T = 3 7s = ? tens. **A**: T = 3*7 = 21 = 2.1 tens. **Q**: T = 47 = ? 6s. **A**: T = (47/6)*6 = 7 6s & 5
	Multiply & Divide with **BundleWriting** creates or removes overloads **Q**: T = 7 * 463 = ? **A**: T = 7 * 4BB6B3 = 28BB42B21 = 28BB44B1 = 32BB4B1 = 3241 **Q**: T = 3241 / 7 = ? **A**: T = 32BB4B1 / 7 = 28BB44B1 / 7 = 28BB42B21 / 7 = 4BB6B3 = 463
	ADD NextTo. **Q**: T = 2 4s + 3 5s = ? 9s. **A**: T = 2.5 9s (*integration*) **ADD OnTop**. **Q**: T = 2 4s + 3 5s = ? 5s. **A**: T = 1.3 5s + 3 5s = 1B3 + 3B = 4B3 = 4.3 5s
	DoubleCounting in two units creates **PerNumbers** **Q**: T = 10$ = ?kg with 4$ per 5kg. **A**: T = 10$ = (10/4) * 4$ = (10/4) * 5 kg = 12.5 kg
	Reversed Addition: Solving Equations by moving to Opposite Side with Opposite Sign
15-16	Coffee. Skype Conference.

2 x ? = 8 = (8/2) x 2	**2 + ? = 8** = (8-2) + 2	**T = 2 3s + ? 5s = 3.2 8s**
? = 8/2, *ReCounting*	**? = 8-2,** *ReStacking*	? = (3.2 8s – 2 3s)/5 = ΔT/5, *Differentiation*

2*4/5	**1.some**
2*4 – 1*5	**3**



Background

The effect of MathDislike is seen in the 2015 OECD report *Improving Schools in Sweden*: 'PISA 2012, however, showed a stark decline in the performance of 15-year-old students with more than one out of four students not even achieving the baseline Level 2in mathematics at which students begin to demonstrate competencies to actively participate in life'.

MATHeCADEMY.net offers UK or DK online Teacher Training based upon Action Learning and Research papers on BundleCounting published at the ICME 2004-2012 *(mathecademy.net/papers/icme-trilogy)*. More details on MrAlTarp YouTube videos:

MATHeCADEMY.net
Teaches Teachers to Teach MatheMatics as **Many**Matics

Yes, Let's Try a Seminar!

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