

Cure MathDislike: CupCount 'fore you Add

1Day Skype Seminar on CupCounting, ReCounting & CupWriting

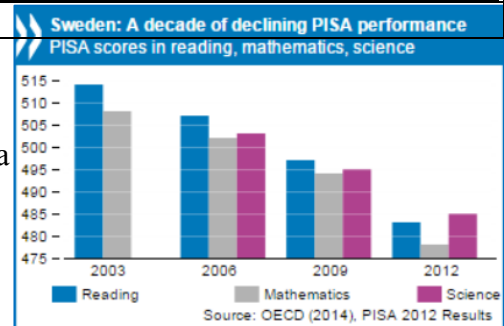
Action Learning on the child's own 2D NumberLanguage as observed when holding 4 fingers together 2 by 2 makes a 3-year-old child say 'No, that is not 4, that is 2 2s.'

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: <i>MatheMatism</i> , 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: <i>MetaMatics</i> , 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: <i>ManyMatics</i> , a natural science about Many mastering Many by CupCounting, ReCounting & CupWriting: T = 5 = = = 1)3 2s = = 2)1 2s = = 3)-1 2s.	
11-13	Skype Conference. Lunch	
13-15	Doing: Trying out the CupCount 'fore you Add booklet to see proportionality and calculus and solving equations as golden LearningOpportunities in Cup- & Re-Counting and NextTo Addition.	
	RECOUNTING , in the same unit creates over- or under-load, in a new unit creates <i>proportionality</i> Question: T = 2.1 3s = ? 3s. Answer: T = 2.1 = 2)1 = 1)4 = 3)-2 3s Q: T = 2 3s = ? 4s A: T = 2 3s = = = 1)2 4s = 1)1 5s = 3) 2s = 1)1) 2s = 11.0 2s CalculatorPrediction. Q: T = 2 4s = ? 5s. A: T = 1.3 5s since 2*4/5 1.some <i>RecountFormula</i> T = (T/B)*B says 'From T, T/B times, Bs can be taken away' 2*4 - 1*5 3	
	RECOUNTING in and from Tens resizes blocks meaning teaching <i>multiplication before addition</i> : 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 CupWriting creating or removing overloads Q: T = 7 * 463 = ? A: T = 7 * 4)6)3 = 28)42)21 = 28)44)1 = 32)4)1 = 3241 Q: T = 3241 / 7 = ? A: T = 32)4)1 / 7 = 28)44)1 / 7 = 28)42)21 / 7 = 4)6)3 = 463	
	ADD NextTo. Q: T = 2 4s + 3 5s = ? 9s. A: T = 2.5 9s (<i>integration</i>) ADD OnTop. Q: T = 2 4s + 3 5s = ? 5s. A: T = 1.3 5s + 3 5s = 1)3 + 3) = 4)3 = 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	
	$2x + ? = 8 = (8/2) \times 2$? = 8/2, ReCounting	$2 + ? = 8 = (8-2) + 2$? = 8-2, ReStacking
	$T = 2 3s + ? 5s = 3.2 8s$? = (3.2 8s - 2 3s)/5 = ΔT/5, Differentiation	
15-16	Coffee. Skype Conference.	

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 2 in 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 CupCounting published at the ICME 2004-2012 (mathecademy.net/papers/icme-trilogy). More details on MrAITarp YouTube videos:



MATHeCADEMY.net

Teaches Teachers to Teach MatheMatics as **ManyMatics**

Yes, Let's Try a Seminar!

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