The Essentials of Numeracy
Learning to date from the NHS, National Numeracy Day and elsewhere

ALM Conference 11th July 2018
The context: Something has worked for literacy – but numeracy is getting worse…

Adults in England with skills equivalent to the level we expect of a 16 year old:

### What are we trying to do?

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<th>Messages and Activities</th>
<th>Settings</th>
<th>Changes</th>
<th>Outcomes</th>
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<td><strong>Increasing Awareness</strong></td>
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<td>Poor numeracy widespread</td>
<td>Culture/Media</td>
<td>Less superficial reporting</td>
<td>Environment conducive to individuals improving their skills and attitudes to numbers and data</td>
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<td>Hidden, impacts individuals’ life-chances and productivity</td>
<td>Policy</td>
<td>Policy focus on numeracy for everyone, for life</td>
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<td>Numeracy is a life-skill</td>
<td>Partner org</td>
<td>Organisations come to see importance of identifying and addressing poor numeracy</td>
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<td>Related to but different from mathematics</td>
<td>Individuals</td>
<td>Individuals come to see importance of identifying and addressing poor numeracy</td>
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<td>Everyone can improve National Numeracy are here to help</td>
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<th><strong>Improving Numeracy</strong></th>
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<td><strong>Identify</strong></td>
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<td><strong>Learn</strong></td>
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<td>Journey into employment</td>
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<td>Financial Capability</td>
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<th><strong>Improving Communication of Numbers and Data</strong></th>
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<td>Numeracy Audit</td>
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<td>‘Plain Numbers’ Accreditation</td>
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Being numerate is more than maths knowledge

Being numerate is knowing what to do with the tools…

…so that you can use quantitative information to make good decisions

Our Essentials of Numeracy

…the confidence and competence to use ‘simple’ maths in complex situations.
‘Mathematical resilience’ is key

Understand the value of maths in everyday life

Ability is not fixed

Develop a ‘can-do’ attitude

Value

Recognise the benefits of improving numeracy

Belief

Recognise that everyone struggles in order to succeed - its part of the learning process

EFFORT
We now have data across these 7 variables for over 29,000 adults who are learning maths...

...and data on the maths skills of over 122,000 adults learning maths.
We’re all numbers people.

Many of us say we’re not numbers people. But numbers play a big part in all our lives. National Numeracy Day is all about recognising this and helping people sharpen their skills and build their confidence. Being better with numbers isn’t a special talent, it’s something we can all learn.

So join us on 16th May and make numbers work for you. You can even start now and check your skills using our free online tool.

Register now to join us on 16th May National Numeracy Day

Already registered?
See how you can get involved.
The UK’s first National Numeracy Day succeeded in...

10,000 people registered to start improving their numeracy on our free online tool on May 16th

25,000 people registered throughout May 2018.

100 Organisations officially backed the campaign with many more getting involved on the day.

#NationalNumeracyDay

Trended nationwide on Twitter.


Support from: Countdown star Rachel Riley, TV money advisor Martin Lewis, Deputy Chief Economist at the Bank of England Andy Haldane, Chief Secretary to the Treasury Liz Truss, Skills Minister Anne Milton, weather presenter Heather Reid and Depute First Minister of Scotland John Swinney.

...reaching out beyond the education & skills system with a positive “we’re all numbers people” message.
We have been working in the NHS for 3 years, with over 20 trusts, gathering evidence of poor numeracy and its impact...

Of the NHS staff who have volunteered to take our online assessment, 77% do not have the Essentials of Numeracy.¹

Patient safety
“We had a nurse who calculated the BMI incorrectly and the patient was given the wrong dose of Chemotherapy as a result – so we have seen how serious it can be”
Practice Educator NHS Trust

Efficiency
“We are constantly throwing out catheters which are out of date because they are not interpreting the usage data correctly.” Orthopaedic Nurse

Recruitment
“Time and time again we are losing good potential staff because they are failing the numeracy.”
HR Manager

Career Progression
“We have had appalling non-passes among HCAs. Its shameful for us as a trust. People either don’t go to university that year and delay their career or just don’t bother going forward at all” L&D Team

…our results show that poor numeracy is common amongst HCAs and nurses. This impacts patient safety, efficiency, recruitment and career progression.
However, this CAN be addressed: we have run pilot programmes in which EVERYONE has improved...

...using our unique online approach which focusses on the Essentials of Numeracy – the skills and attitudes needed for work and everyday life.
Some current policy-makers seem to get this...

“...I’m calling on everybody to get involved with this important campaign and check whether you have the Essentials of Numeracy. You can visit the website – nnchallenge.org.uk - to find out how you can make numbers work for you. Do a simple test and it will redirect you, so that you can make sure you get better.”

Skills Minister, Anne Milton 29th March 2018

...and we hope to provide further evidence of positive action to address this issue in the coming years.
We would like to engage with the maths research community...

Our focus is on:

1. **Shifting attitudes:** ‘I can’t do maths’ is at the heart of the issue so we have worked with employers to define the ‘Essentials of Numeracy’ that everyone needs

2. **Check** whether adults have the Essentials – and if not help them!

...to help us to better understand ‘what works’ and how to best replicate at scale.
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