

Myths in Education

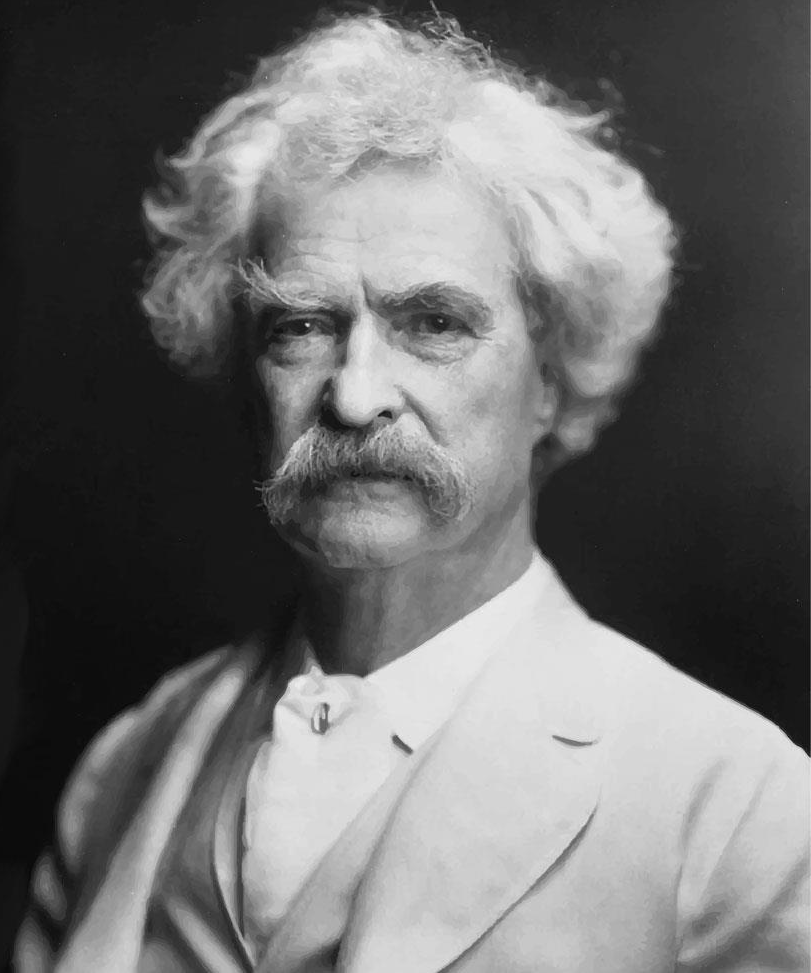
Thomas Martell

Sedgefield

9th February 2018

It ain't what you don't know
that gets you into trouble. It's
what you know for sure that
just ain't so.

Mark Twain



In the next 15 minutes

Myths about teaching and learning

Why myth busting fails

Myths about using research evidence

Which of these are myths?

We mostly only use 10% of our brain

Individuals learn better when they receive information in their preferred learning style (for example, visual, auditory or kinaesthetic)

Short bouts of co-ordination exercises can improve integration of left and right hemispheric brain function

Differences in hemispheric dominance (left brain or right brain) can help to explain individual differences amongst learners

Children are less attentive after sugary drinks and snacks

Drinking less than 6 to 8 glasses of water a day can cause the brain to shrink

Learning problems associated with developmental differences in brain function cannot be remediated by education

We are not alone...

We mostly only use 10% of our brain

Individuals learn better when they receive information in their preferred learning style (for example, visual, auditory or kinaesthetic)

Short bouts of co-ordination exercises can improve integration of left and right hemispheric brain function

Differences in hemispheric dominance (left brain or right brain) can help to explain individual differences amongst learners

Children are less attentive after sugary drinks and snacks

Drinking less than 6 to 8 glasses of water a day can cause the brain to shrink

Learning problems associated with developmental differences in brain function cannot be remediated by education

% who 'agree' rather than 'disagree' or 'don't know'

	UK	Holland	Turkey	Greece	China
We mostly only use 10% of our brain	48	46	50	43	59
Individuals learn better when they receive information in their preferred learning style (for example, visual, auditory or kinaesthetic)	93	96	97	96	97
Short bouts of co-ordination exercises can improve integration of left and right hemispheric brain function	88	82	72	60	84
Differences in hemispheric dominance (left brain or right brain) can help to explain individual differences amongst learners	91	86	79	74	71
Children are less attentive after sugary drinks and snacks	57	55	44	46	62
Drinking less than 6 to 8 glasses of water a day can cause the brain to shrink	29	16	25	11	5
Learning problems associated with developmental differences in brain function cannot be remediated by education	16	19	22	33	50

Why myth busting fails

Teaching

Teachers must ditch 'neuromyth' of learning styles, say scientists

Eminent academics from worlds of neuroscience, education and psychology voice concerns over popularity of method

Sally Weale
Education correspondent

Mon 13 Mar 2017
00.01 GMT

 This article is 11 months old

 49k  374



Teaching children according to their individual “learning style” does not achieve better results and should be ditched by schools in favour of evidence-based practice, according to leading scientists.

Myths about using evidence

Innovation is always a good thing

Introducing lots of new ideas will make a big difference

Evidence tells us what will work

Myths about using evidence

~~Innovation is always a good thing~~

Disciplined innovation – build on what we already know

Introducing lots of new ideas will make a big difference

Evidence tells us what will work

Myths about using evidence

~~Innovation is always a good thing~~

Disciplined innovation – build on what we already know

~~Introducing lots of new ideas will make a big difference~~

Focus on a limited number of promising ideas

Evidence tells us what will work

Myths about using evidence

~~Innovation is always a good thing~~

Disciplined innovation – build on what we already know

~~Introducing lots of new ideas will make a big difference~~

Focus on a limited number of promising ideas

~~Evidence tells us what will work~~

Evidence tells us what has worked in the past

Access to research is not enough...

The Literacy Octopus: Communicating and Engaging with Research

Multiple delivery teams

A large multi-arm randomised controlled trial, investigating a range of different methods of communicating research to schools and engaging them in research evidence.

1A 'Improving Reading' guide 0 Months' Progress

2A Evidence updates & website 0 Months' Progress

3A Webinar 0 Months' Progress

4A Teaching How2s website 0 Months' Progress

1B Evidence updates & website 0 Months' Progress

2B Evidence updates & website + event 0 Months' Progress

3B Teaching How2s website 0 Months' Progress

4B Teaching How2s website + intro event 0 Months' Progress

5B 'Improving Reading' guide & emails 0 Months' Progress

6B 'Improving Reading' & emails + CPD session 0 Months' Progress

7B 'Improving Reading' & emails + CPD sessions & tools 0 Months' Progress

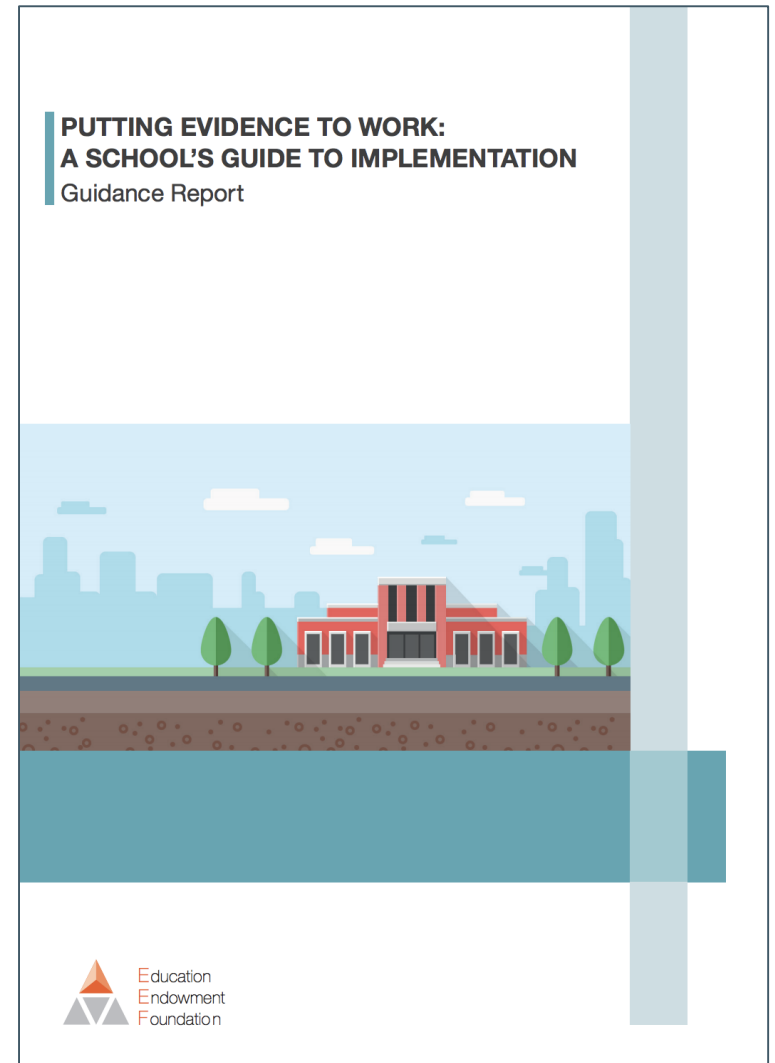
8B Conference 0 Months' Progress

9B Conference + webinars 0 Months' Progress



Implementation – launched today!

Ultimately, it doesn't matter how great an educational idea or intervention is in principle; what really matters is how it manifests itself in the day-to-day work of people in schools.



References

[EEF \(2018\) Putting evidence to work. London](#)

[Guardian \(2017\) Teachers must ditch 'neuromyth' of learning styles, say scientists](#)

[Howard-Jones, P. A. \(2014\). Neuroscience and education: myths and messages.](#)

[Lord, P., Rabiasz, A., & Styles, B. \(2017\). “Literacy Octopus” Dissemination Trial Evaluation report and executive summary. London.](#)

[Lord, P., Rabiasz, A., Roy, P., Harland, J., Styles, B., & Fowler, K. \(2017\). Evidence-based literacy support: the “Literacy Octopus” trial Evaluation report and executive summary. London.](#)

Further reading

Why myth busting fails

<https://deansforimpact.org/why-mythbusting-fails-a-guide-to-influencing-education-with-science/>

Dylan William on the role of neuroscience in education

<https://www.tes.com/news/school-news/breaking-views/memories-are-made>

Get involved

Sign up for our EEF News Alerts

Hear about our latest news via email: www.tiny.cc/eefnews

Explore our resources

Visit: <http://educationendowmentfoundation.org.uk/resources>

Find out about our trials

Visit: <https://educationendowmentfoundation.org.uk/projects-and-evaluation/recruiting/>

Contact

Email: thomas.martell@eefoundation.org.uk