

# Journal Club



Biscuits:  
Chocolate Chip HobNobs.

The Westbury Journal Club looked at Daniel T Willingham's 2008 article, 'What Will Improve A Student's Memory?'. Willingham explores how the mind works, how it learns, and how we can use this information to help improve students' memory.

We discussed Willingham's three principles of memory and recommendations, exploring how we might be able to take these and apply them to the classroom.:

1. Memories are formed as a residue of thought. We need to be clear what we want the pupils to learn in our lessons and ensure that the tasks we set ensure pupils think about the right things. The article included some examples of mnemonics to use if what you want to be remembered has little meaning, and we discussed how we might use these.
2. Memories are lost mostly due to missing or ambiguous cues. We talked about the importance of distributing study over time, and the potential for using previously covered material as examples in later topics.
3. Individuals' assessments of their own knowledge are fallible. We discussed providing opportunities for pupils to test themselves using the same type of tests they will be taking.

We also looked at the demonstrations of the three principles and whether we could present these to our pupils in order to help demonstrate how their memory works,

## Evidence-Based Teaching in Primary Education

Teachers at Allenton Community Primary School in Derby, part of the Transform Teaching Schools Alliance, have worked with Val Poultney from the University of Derby to write a book about their experiences of Evidence-Based Teaching In Primary Education'.

Their book focuses on how universities and primary schools can work together, including advice and case studies written by teachers to provide examples of how schools can achieve sustainable approaches and positive outcomes.



The first Teach Meet Midlands of the school year has been announced and will be on:

Wednesday 22nd November 2017

5.30pm till 9:00pm

This is an opportunity for education professionals from all sectors to take part in sharing ideas from the classroom and network at an informal environment.

Keynote speaker will be Johnathan Lear, primary teacher and author of 'Guerrilla Teaching'. Presentations will be 2 or 5 minutes long, with the usual prize draws and freebies. If you are interested in attending, please visit the webpage where you can also register to give a presentation.

The venue is The Jubilee Conference Centre, Triumph Road, Nottingham, NG7 2TU which has free parking. Free food and soft drinks are provided and there is a cash bar.

<https://goo.gl/sw8snm>

Edited by Beth Greville-Giddings

INSIDE



Teacher Tapp:

'The app teachers tap to make schools smarter'



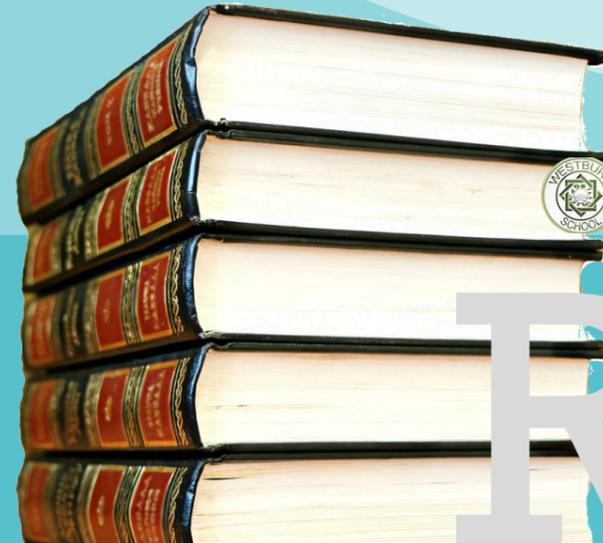
EBT in Primary Education:

Book from Allenton Primary



Edu-blog Spotlight:

Dawn Cox questions plenaries



Westbury Academy Learning and Development Bulletin

# Relay

## Cognitive Load Theory

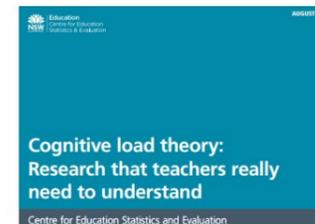
Issue 16,  
October 2017

This 2017 paper from the New South Wales Centre for Education, Statistics and Evaluation describes how human brains learn through the evidence base for Cognitive Load Theory (CLT) and what this means in practice.

Described by Dylan William as 'the single most important thing for teachers to know', CLT has its foundations in the work of Educational Psychologist John Sweller and colleagues and aims to develop ways to maximise learning within the characteristics of working memory - that there is a limit to how much new information the human brain can process at one time and that there are no known limits to how much stored information can be processed at one time. The paper explores the relationship between working memory, long term memory and 'schemas'.

There is a detailed explanation of the three types of cognitive load; intrinsic, extraneous and germane, and how they may contribute to cognitive overload. The evidence base for CLT is set out with analysis of a number of studies noting that instruction tends to be more effective when it is designed according to how the brain processes and stores information, but presents questions that arise over definitions of cognitive load, concerns over methodological rigour and external generalisability.

(continued inside)



### Recommendations for the classroom from cognitive load research

The 'worked example effect'

The 'expertise reversal effect'

The 'redundancy effect'

The 'split attention effect'

The 'modality effect'

<https://goo.gl/JRuSje> (pdf)

**Cognitive Load Theory** proposes that total load is comprised of the three types of cognitive load - intrinsic load, extraneous load and germane load.

# Three Types of Cognitive Load

**Intrinsic load:** This relates to the inherent difficulty of the subject matter and is influenced by both the complexity of the material and the prior knowledge of the learner. Subject matter that is difficult for a novice may be easy for an expert.

**Extraneous load:** This is referred to as the 'bad' type of cognitive load and relates to how the subject matter is taught and whether instruction directly contributes to learning.

**Germane load:** This is described as the 'good' type of cognitive load and refers to 'the process of transferring information into the long-term memory through schema construction'.

As these are considered to be additive, for instruction to be effective, total cognitive load needs to remain within the limits of working memory.



There are half a million teachers in England, but their opinions are often ignored. Teacher Tapp is an experiment in an app for teachers to download and answer daily questions about their opinions and experiences.

The team behind Teacher Tapp are Dr Becky Allen, former teacher and Director of Education Datalab; Laura McInerney, former teacher and education journalist; Alex Weatherall, science teacher with a background in software development and Sam Sims PhD candidate and researcher at Education Datalab.

Each day at around 3.30 Teacher Tapp asks three questions on your phone. It is hoped that by answering these, teachers will give the first ever daily insight into teachers' lives. In return, participants get daily insight into what other teachers are thinking and there is also a surprise each day - including articles gift codes and prize draws.

The app was launched at the beginning of September and there are already over 1000 people taking part. Answering the questions is designed to take just a few seconds and there is a mechanism for providing feedback on questions and usability. The app can be downloaded by anyone but questions are really designed for teachers, rather than teaching assistants or other staff.

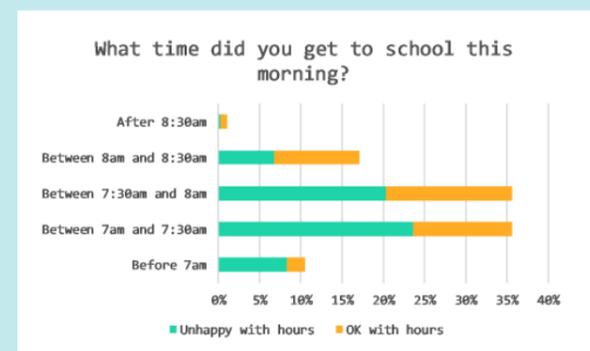


Your headteacher tells you that you will be given time off your timetable to run a new lunchtime or after-school club. Choose the club you would most like to run from the following list. You must choose one!

- Choir or orchestra
- Debating
- Chess
- Knitting or craft

So far Teacher Tapp has asked questions about areas such as working hours, behaviour policies and use of teaching assistants and hopes in the future to use the information to make policymakers, school leaders and teacher trainers smarter and wiser in their work.

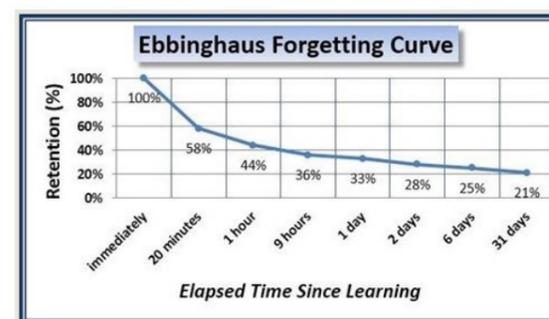
For more information about the app itself and the information gathered so far visit their website and blog: [teachertapp.co.uk](https://teachertapp.co.uk)



# Edu-Blog Spotlight

Dawn Cox is a secondary teacher in Essex and has worked in education for over 15 years. She blogs at [missdcoxblog.wordpress.com](https://missdcoxblog.wordpress.com) and tweets as [@MissDCox](https://twitter.com/MissDCox).

In this recent post, Dawn asks 'Are we wasting time on plenaries?'. During a time when teachers were expected to be able to show progress over short periods of time, plenaries were a useful tool to show pupils could do the thing they had just been taught. Looking at research on memory and learning, she believes that the use of time in lesson should come down to two things: learning new stuff and repeating already learnt stuff to support long term retention. She asks where the plenary might fit that model.



Referencing the Ebbinghaus Forgetting Curve, she suggests that plenaries could be part of the first recall of learning from a lesson; the next time you teach them, you need to get them to recall the previous learning and suggests that if the space between lessons is longer, homework might be appropriate for being the 1/2/6 days recall.

In her opinion 'the best, quickest, shortest way of recalling prior learning is a quick 1-10 at the start of the lesson. After several lessons this will need to include content from the last lesson and then previous lessons with increasing gaps. The plenary of the lesson can then be the recap of that lesson. However a plenary doesn't always need to be a separate part of the lesson at the end.' By constantly making links and embedding content throughout the lesson there is a natural repetition which removes the need for planned plenaries.

She concludes that plenaries aren't necessarily a waste of time and have a function in long term learning. However she does think using plenaries to 'prove' progress in lessons needs to be scrapped and doing a 1-10 starter which includes content from months ago is a better indicator of progress.

Full post and comments here: <https://goo.gl/4YAEan>

You've been asked for some information or a pupil report for a meeting, but what do all those letters mean?

# Decoding the Diary Sheet

## NEU

The National Education Union was formed in September 2017 by the merger of the National Union of Teachers and the Association of Teachers and Lecturers.

It is a trade union for school teachers, further education lecturers, education support staff and teaching assistants, and is the largest education union in the UK with over 500,000 members. Unlike the former NUT, the NEU is a union of teacher and 'allied professionals' and admits unqualified teachers.

The new union will have two general secretaries for the first five years as former general secretaries of the NUT and ATL, Kevin Courtney and Mary Bousted, share the role. In 2023 a new general secretary will be elected.

There are currently no plans from other unions representing teachers to merge with the NEU.