# Pedagogy Matters: Episode 6 Transcript

Hello and welcome to the latest episode

of the Pedagogy Matters podcast.

The purpose of his podcast is to bring to

the fore some core topics of conversation

in relation to learning and teaching,

to discuss to breakdown aspects

of practice and provide snippets,

advice and guidance as to how to

integrate these into your daily practice.

Today, I'm delighted to be joined

by a leak of former headteacher,

author of a number of books

on visual teaching strategies,

including Jewel calling with

teachers and Ali is working with

Tom Sherrington to produce the

walkthroughs which are visual guides

to support instructional coaching.

Holly, good morning. How are you?

Hi, nice to be here now.

Thank you for joining us.

You know really delighted to have

you here and I've been a big fan

of your work in a previous job.

And yeah, it's really really interesting.

Really insightful.

So today we're going to talk on dual coding,

duel coding for teachers.

But also how we can transfer

that more broadly.

So I think will be useful to start

with is orchestra breakdown as

to what is meant by jewel coding.

Yeah,

I mean in many way at about four

years ago I I work with two cognitive

science professors in America

and I illustrated their book and

they had the six most effective

teaching and learning strategies.

And one of them was under the term

dual coding. So that's been around.

Ashley's been around since the 1970s.

It's a very technical term you

might pick up in a psychology book.

What is it? What does it mean in all

kind of one of the core principles?

Would you say yeah,

well before I do that, it's it's,

you'd know it as visual teaching strategies.

Oh, that's what it is.

So in a sense, it all those visual

teaching strategies that you will know

about in in a way they've been rebranded.

So let me tell you why it's quite important,

because before people instinctively

thought well, obviously.

All human beings pretty much learn

better when you show them as well

as just tell them you know it's.

It's kind of intuitive and you've learned

that ever since you've been on the planet.

But your coding gives it a lot of research.

So Canadian psychologist

called Allen Pie Video he.

He created this theory and it was,

you know nineteen 7071 and he only died

last year and all those intervening years,

albeit over 40 years, 50 years.

He spent researching this one theory.

So and in the latter decades that

included not just psychological testing,

but also neuroscience.

So they checked out what the brain does,

so it pretty much is probably

the most robust.

Theory we got in education.

And here's what it says that we take

in information with all our senses.

You know, we smell, we, we taste,

we do everything but the two major

ones are what we hear and what we see.

And The thing is, and it is,

we may not realize this.

They come in two different channels.

OK, so So what do you mean by that?

Two different channels well?

What it means is that, well,

let me say a bit more and

then say make it click off.

The process differently,

so they processed separately.

And here's the important

thing to make learning easier,

so we take in visual information

and you know our working memory

is really really tiny and there's

nothing we can do about it.

You can go on a you go on a 10,000

pound brain training course in

California and they kind of they

sell that sort of stuff and it

doesn't make any difference.

So the biggest challenge in teaching

is dealing with all the students.

Working memory,

which is by definition is tiny.

That kind of another way to

talk about working memory.

Although I'm going to use a longer word,

it simplifies.

It is your consciousness

or what you're aware of.

So right now we're aware of now and

then this bit and then this bit and

all the other bits are disappeared.

There's only so much you can be

aware of and it's down to almost a

present moment or a few seconds worth.

I think it's up to 15 seconds

technically and then kind of

you just can't hold onto it.

So.

What we see we can hold onto a

brochure period of time and separately.

What we hear with your words we

hold on for a short amount of

time and they are separate now.

I often wondered why that was

and then I guess it was survival

so that when it's dark,

guess what you can still hear.

That makes sense, yeah, so they are separate.

They are separate,

but they can work together.

And when they do work together,

they joined together to create

like a unit a bundle.

So imagine you you only just

started learning French and I

teach you the word for cat Lucia,

so you would you would be you.

I get to be familiar with the word

luceat see it and you would also hear it.

And I'd also show you a picture.

And so all the sudden are you

got this bundle of meaning?

You got the image and you got the word,

and so they get joined together and

the learning process psychologists.

It's if they're trying to confuse us,

which is weird,

and they use the word encoding encoding.

It just means making sense of

stuff as you learn, and so.

Whereas before you might encode the word cat.

As a picture, as you've seen it,

you learn it and then later on

at some other time you learn.

The spelling and the sound of the word cat.

Or here they come together in one bundle.

So in a sense the notion of cat

in French has been encoded twice.

The image has been encoded on

the words been encoded,

so actually that's why we

get the word dual coding.

No, that makes sense.

So just I guess just to summarize,

us obviously principles look at

taken information in two different

ways, visual and audio.

As you were saying there,

and I guess a different way of looking

at it is it gives you two opportunities

to retain this information after

two to remembers information stage.

So sorry, yeah, so if you imagine

arrows going into your head,

that's not the learning bit.

And then. And then the going out bit.

Which is recall remembering retrieval?

We wanna call it yeah, then.

The learning psychologists say

it leaves a double memory trace.

Professor Paul Kirschner,

who's who's a big shot?

He's written an article which he calls

geocoding double barreled learning.

Forget the gun metaphor is

double barreled learning,

so when it comes to remembering you

actually get double the chance of

remembering it because it could be

triggered by the image which helps

trigger the word or vice versa,

or very probably both.

So as a major part of learning

involves remembering.

Cousin offense there's no thinking this.

There's nothing if we can't

remember without goldfish,

so it's not the whole story,

but there's no other story unless it happens.

If we have a method that

doubles its chance of success.

I mean,

the only question you can ask

is who wouldn't ever use it?

I don't know,

sounds too good to be true,

but you're absolutely right

in terms of there,

and I guess thinking back to my

learners as a as a younger person or

in my teaching and often we throw a

lot of information students you know,

I'm thinking back to the PowerPoint

slides with lots and lots of content,

you know.

But time is very little images and I

guess what your signal makes total sense of.

Consider how you can provide the

content or the information as well

as potential images that we are

seeing here in terms of how we

should be doing this within practice.

Yes, it is entirely,

although I have an overriding thing.

Is that anything good?

If it's done all the time,

gets boring and doesn't stand out so?

I often say if everything stands out,

nothing stands out.

So what is let me go to the extreme,

which would be overkill.

Every single word and every

single everything you do,

there's an image by it.

Then it kind of it loses its power.

It's like wallpaper, yeah,

so pick the things you really want

to stand out.

Memorable,

hook them and then find some

kind of image to go with it.

I mean I can talk about the types

of images that are more successful,

I may try and I'll talk when

we talk later on,

we'll talk about how to do.

You know, we can talk about photographs,

black and white images video.

Which ones work best?

But fundamentally that's it.

So the other thing we need to bear in mind,

of course,

is because we talked about our working

memory is so tiny and limited,

and we've we've got.

More power to the one item of Cat

could be got in visual verbal form.

It leads us invariably onto the

other major theory. In education.

We still in William in East William Williams,

quite well known in Fe says is the single

most important theory for teachers to

know which is cognitive load theory.

That's more recent 10 years, you know.

In 1980, John Sweller.

Really, it's a theory which is so

practical that never goes away

whenever you're teaching. Anybody?

One of the biggest considerations

is how much do they already know.

Because the risk of overloading

someone are confusing them.

Is most dangerous when the students

are meeting something completely new.

That's when you get overwhelmed.

Interestingly,

yesterday I was reading a research paper

about accountancy students and they

had this research where they had to

judge how quick the lecture was talking.

Yeah yeah yeah curious,

the faster is the mall.

Overwhelmed, they're right.

OK, and what they found was when

they didn't know a lot about

the subjects it was unfamiliar.

They they didn't grasp the major concepts,

it felt like the lecture was speaking

incredibly quickly when they were

familiar with the major concept and

they're just dealing with the details.

Oh, hold on the lecture speaking

at much lower, I think.

The same.

The speed was the same and the

determining factor is.

How familiar are you with aspects

of unfamiliar material?

So cognitive load in a way?

Is not relevant if you're dealing

with stuff you already know.

Because you've already put in essence,

mustard it.

So therefore you've got the foundation

knowledge information.

So for the cognitive load is an issue.

Yeah, whereas you seeing if the new

content you become overwhelmed with

all the different bits of information,

I guess like learning to drive a car

the first time you step foot in the car,

there's all the things that you have to do.

Indicators, mirrors,

gears and so on and so forth.

Where is actually when you mastered that?

There's no cognitive load.

There was driving a car.

Then you have your music on.

Lending have different factors is that.

Is that a fair example?

That's a perfect example.

Yeah,

exactly so exactly so,

so I guess how does so come back

to the jewel coding side of

things and the cognitive Lord?

Or we just saying there not?

Lectures need to have an awareness

of where learners or at the stage or

modular topic or content of learning.

And then consider that in relation

to the amount of information

that present and how they present

it exactly that exactly that.

And it's it's always a critical thing.

You really need to know.

As best you can.

What students already know,

yeah.

I mean a definition of learning

is is you connect new material

to what you already know.

And if the new material has absolutely

no connection to what you already know.

In theory,

it's impossible to learn wow,

so you have to really wiedel out,

even if it's quite a long way away and

disconnected some aspect that you can say.

And when and of course you don't

need to be a teacher to know that,

so you know people are always saying,

wow, it's a bit like.

So.

Many psychologists say learning

is fundamentally about analogies

by analogies is so when I mean,

you know the typical one electricity,

well, you know how water and of course

it's a dangerous one you don't expect.

Analogy only goes so far,

but it goes far enough to people I've got.

It is like there's something that

travels within something and you

can kind of stop it, divert it,

may put more pressure, less pressure.

And that's all they need to know.

And really, when you really look

at learning much of inserting the

most effective one is based on this

phenomenon that human beings, no,

I don't have to go and get a degree in

psychology to know that it's analogy.

So we already know and then kind of link it.

Not useful to I guess for you to

reinforce goes through different

episodes of this podcast.

We're talking around,

but it's really important to

start with less snow storm module

that you continuously check.

What learners nor what they understand

and building up their schema,

and I guess it's gonna be support

by what you said here because then

to develop knowledge even further,

you build on their initial knowledge.

And if they haven't got the

foundation blocks well,

then you've got to go back and relearn noise

and learn the basics before you move on.

Yeah, can I just say something there

since I'm going off your coding,

but it's really really important

colleague that I'm working with,

Tom Sherrington.

He does work in in a number of Fe colleges,

but his ongoing work with Oldham College.

Yep anyway.

Serving colleges and schools,

he says the number one technique.

Critical to student success.

That's teachers think they do think they

do well and think they do often enough.

Is the one that he says on the whole.

They don't do well enough.

They don't just figure and that

is check for understanding.

Yeah,

check for understanding becausw just 'cause

you say stuff just 'cause you show stuff.

Just because the keen

ones put their hands up.

That almost has nothing to do.

Whether Joe in the corner or sorry.

So the trick then is is is having

activities and discussions

that people feel safe enough.

To be able to voice what they think

they know know totally agree.

I mean from my previous experience and

often overused strategy to check on the

standing's question to the whole class.

When you're getting information

from one or two learners.

So it's really difficult to do,

but as a teacher lecturer,

it's about constantly understanding

of all learners and making sure they

understand how to allow you to move

on and or totally agree with that.

And that's fundamental to occur,

kind of all aspects of teaching practice.

Yeah, yeah, so it's great.

So come back to Jewel code annoyance

or talk around. Then what it is?

We'll talk really quite a lot wrong.

Why? How should be done?

But that's a key, but I think everyone knows.

How do we do this in practice?

It's not easy.

Or is it?

Wolf invariably we now move into see all

the books I've read about your coding.

That's interesting.

And if that and I've read some, you know,

I'm reading layers 900, page tome.

Yeah, I've had loads of such similar books.

Just 'cause you measure it as a psychologist,

it doesn't mean you're any good at it.

So and of course it's and I was really

disappointed by that, but that again,

that was really silly on my part.

It's like expecting a sports journalist

to be any good at sports, yeah?

Enjoy, it doesn't mean any good absolute.

Yeah, that's a good point analogy.

Go into.

The executing it is about you ought

you you start getting involved

whether you want to or not,

with principles of graphic design, OK, yeah.

Now my background is that my father

would not detect and I don't know.

But you know architects, he was an architect,

topographer graphic designer.

So I kind of immersed in it and

I've been working with teachers

for over 40 years and my wife said

teacher so I know what the teachers

mistakes that teachers make when

they start incorporating visuals.

And they are really quite common

mistakes and their natural mistakes.

If you know nothing about it.

So if you get someone who's very

enthusiastic, so you're cozy,

I really need to to pep up my stuff.

And equally they know nothing

about graphic design.

Yeah,

you'll get familiar and consistent mistakes.

So when I started becoming more active

on Twitter and I've had some of my

my workout and I display on Twitter,

I had lost her teacher saying over.

Can you give me some advice I you know

and I've gotta live before the books.

I've even got a book and it's very good.

It's called design for non designers by

Robin Williams is about 20 odd years old.

Even that,

I would hesitate to give it to a teacher

who isn't going to really get into it,

so I know,

but here's a here's a teacher

I've got so much spare time from

my teaching and my family.

I think I'll devote 10 hours

to reading all these books.

You know, it's not going to,

and then another few hours

experimenting is not going to happen.

So in the end, I was forced to,

and I really enjoyed the challenge.

What four principles can you use

to make sure it really works?

And these four principles?

Although I'm informed by all the books.

It's applied to what I see with teachers do,

and so forth. For simple principles.

The first ones easiest to understand

and the easiest to execute.

And that's the biggest in effect.

And it's one word is called cut.

So generally what you see is far too much

content on a slide on page on a board.

Cut. This one was a cut of the

reduce the volume of content, yes?

Is that we are seeing that in should we

be including images where appropriate.

Yeah, don't use images all the time.

.2. Is. Chunk chunk.

This seemingly complicated thing called

Gestalt psychology and what it means is,

I mean they all show up how

clever human beings are.

We naturally, if you put things

together you think they belong.

So for example, listers can't see,

but I'm seeing a picture of you and

folk and behind you or some football

shirts that those famous black and

white vertical stripes and what you've

done is you've exhibited chunking.

You've put them close together.

They're not distributed across

the whole war or different walls,

so by putting them close together,

you created an entity,

a thing, a group you know,

and we learn grouping when

we're in Infant School,

you know we have the nature table.

We group blue things in yellow things,

and we group things.

I mean, I talk in a special school,

severe learning difficulties,

and even the youngest in the.

Age of three.

We had a big Velcro board that

they could reach, you know,

and they grouped items that

belong in the house.

Items that belong outside the house.

Yeah so.

And it's the major intellectual

thing that we do.

We group things so when you display things on

a on a say some worksheet or a bit of text.

Physically group them together.

Make sure there's enough paragraphs with

a big space between the paragraphs,

and make sure every paragraph so

beginning into writing now has got a title.

And make sure the title is meaningful.

So for example,

the first title of the first paragraph,

you could waste the opportunity

and call it introduction.

Yeah, but man,

everyone knows the first thing that's

the introduction, so it doesn't help.

So look at what you've written that

first paragraph and and write the title,

which is pithy.

Short, that really signals what it's about.

So it might be.

Setting up a podcast, I'd have that.

Then before I read any of the paragraph,

I know what it's about.

So kind of it connects to already

know or little bit sinoia tunes me.

It sets me up.

It's funny 'cause this whole songs I'm

gonna see it too obvious into simple,

but from my experience of seeing many

many many lectures teacher session.

You're absolutely right.

You know there's a lot of.

I'm gonna say this information.

Let's possibly relevant in.

Or would it be fair to say that

this then at times contributes to?

Cognitive load theory of properly on,

you know a lot of this information,

irrelevant information which can

put learners off the theme of

what they're wanting to learn or

needing to learn is that this here,

absolutely and the wrong order.

So I have this theory that in

education we have to write essays.

Yeah, OK, and I think they corrupt the mind.

Sir essays are fine for the world

of academia and you get on.

You have to write bigger and

longer essays and reports and and

everything and research papers,

but is absolutely.

100% The wrong way to communicate.

So what it does is it has a loader

palava introduction methodology

blah de blah de blah de blah de

blah blah blah and then gum from

come from come from come from come

from detail and more detail and

if you got this salmon at the end

you get you get the punchline.

Yeah.

OK, I thought you understand if you're

not cheating, he's the equivalent, right?

Johnny, we can do a jigsaw puzzle.

Here's a piece.

Here's a piece I'm not showing you the cover.

By the way. OK, here's a piece.

Here's a piece.

Here's a piece.

And then if you are really good boy and

you pay attention for a very long time,

you'll be rewarded the end you'll go haha.

So it was a picture of Big Ben.

Johnny look, it's a picture.

It's about Big Ben.

If you got it right.

OK, so now which bits might be the Clock?

Which bits by it might be the tower,

which is a double Decker bus?

Those bits together to kind of build up

those pieces give it away, give it away.

Let so newspapers are brilliant newspaper

magazine give you examples all the time.

So I'm just gonna give you a kind of going

off your Cody but you have to get this right.

It's in the 1980s.

I'm already remember the 1980s Britain was

at war with Argentina over the Falklands.

And there was some issue about the boat.

The Belgrano was one of the the warships

that the Argentinians had another son.

Forget the politics,

they had a one word title which gave

the whole story way and it wasn't great.

Big bold gotcha. Gotcha.

Then they had a little subtitle,

something about sinking the Belgrano, yeah.

And then the article.

So by the time you read the article,

you got a wonderful title and this

little sentence called a stand.

First, that kind of really sets you up.

So let's compare those principle

that you said so far in terms of cut

the cut out the irrelevant content,

chunked it altogether.

Yeah, chunky signals. Meaning yeah.

Third one.

Is.

Align.

A line, so I've never been able to

stare directly into a teacher said,

but all those hundreds thousands I've met.

I think I've got a formula,

so don't forget that very enthusiastic yeah,

but they don't know anything about

graphic design, so if you think

of that as this plus this equals,

she's like a formula so their mind goes.

So I need to make it exciting.

I need to make it interesting.

I need to engage them so they think so

it needs to be not dull so I know I'll.

I'll make it really kind of jazzy and

what they mean by jazzy and engaging

is they put they put the items on a

page or slide all over the place.

Yeah, as if you were doing a painting.

You know,

so when you're drawing a landscape,

you don't draw all the trees in a nice

neat line because they're not like that.

You don't draw all the Flowers in a,

you know, in the wild like that,

where is actually rather than having

Matisa painter as your as your model,

I would say I'm going to exaggerate now.

A railway timetable.

Or if you buy Sunday paper and they give you.

The following weeks TV programs.

Yeah, but it's also.

Yeah it's all consistent look and feel.

I mean considering how much they cram in.

So don't try and cram in as much as they do.

Yeah, but given they do cram a lot in.

If we as teachers had to do that,

it'll be complete mess,

but they know how to organize things.

So for example,

when you use text apart from titles,

never use centered text.

This is the hardest read because

the eye goes left and it's always

a different starting position.

Yeah, so when you use left aligned

text is called left aligned.

Then you don't even need to have

a a black line by the side.

The the contrast of the of the very

need text with the blank white is

really neat and it helps your I go

to the right place and again this

comeback talks about going to postpone

till this reduces the cognitive

overload which straight away it can

be a barrier to stop learners from being.

Engage with the volume of content.

He's so lucky with the work has

been going on with instructional.

Do that designers online,

you know they really get to know

you 'cause they look at your eyes.

They follow your eyes and they know

what's distracting what it isn't.

They also talk about the emotional

immediate response you get to a screen,

a slide or whatever.

And I'm gonna exaggerate.

The two opposites are and

you recognize it in yourself.

It's either. Yeah,

like deflated young God here goes oyster oh.

Oh it's nice.

It's fresh is clean,

I can I can handle this is not too

much is clear crystal clear because

not the core principles of you

know of teaching fundamentally.

You know you don't want to provide on,

for example, PowerPoint.

Slide all of the content that learners

need to know because the switch off the,

write it down,

disengage or maybe too much

information you want to hook them in.

You want to draw them in and

by doing this it's keeping it

clean and fresh and appealing.

But also as you said there in

terms of reducing the volume of

content and the volume of images

and volume of information.

It allows some hooks to

retain that information, yeah?

Let me tell you a bit of a tip about it,

yeah.

The biggest secret in the graphic

organizer industry is this.

Every poster, every TV screen, every slide.

Everything you ever see every every

billboard at the designers computer,

they've got something called a grid.

So on this screen they'll have say if

I was designing a PowerPoint slide

just I was used to wide extra wide

because that's the shape of screens.

Now I might have 15 vertical

equally space guides and I have 10.

If I do have, I do have 15.

Vertical vertical columns and I'd have

say 10 rows, so it's it's a grid and

then I align all my text and my images.

So it's really aligned,

and when it's done, I take the grid off.

The end user viewer consciously

don't recognize anything,

but it has an impact on you. You go.

This is really well organized for me.

I can navigate, it is.

It's it's digestible.

I can know where I go.

So any newspaper, any magazine, you bye.

If it was designed the way teachers

do without his background knowledge,

it will be unreadable.

Just be unreadable.

Yeah,

so now go and look at newspapers

and magazine and look how

it's all really well aligned.

Very neat and you can do that in

PowerPoint because they now have

guidelines and you can create all your grids.

Yeah,

I think the technology that people

use compared to three or four years

ago you know has caught up with

large elements of this and is a

lot more design ideas and guides.

But yeah I think come back,

these three principles will

come forth in a second.

I guess I'll standard rules of

thumb that our lecturers can pick

up and start using within their

practices if they aren't already.

And then, at least on the 4th one.

So it's a fourth,

or your company curious here.

Restrain yourself, restraining yourself.

So that means. Re strain your color palette.

I mean generally I only use one color

when I'm working, sometimes too.

So the idea,

oh I'll engage them and then rainbow

colors come out. Or you know.

So in psychology and I'll talk

about images very shortly.

You want fewer of everything, less and fewer.

Just recently, I just I'd known about him.

There's a typographer,

Erik Spiekerman,

who's a really nice one minute

video is is a legendary figure.

I mean recently,

few years ago he redesigned The Economist.

It's just that little bit of

cleaner in all the ways that 10s

of thousands more subscribers,

even though they didn't notice

that the difference,

and they didn't know who Eric spiking was.

And you know they didn't

know what topography was.

It has that effect, not absolutely does.

I've gotta stop see a lot of your

work from afar on on Twitter and

social media last couple years and

it does just look a lot cleaner.

Look crisper, looks a lot more engaging,

and that's without, you know,

that's just the perception.

Before even getting into the

learning side of things, you know so.

It's not something that's really

important for

students there as well,

and imagine that across the papers and

the Economist says you've identified.

Yeah, now got another thing which

is in the back of my mind as well.

And I don't know there's any research on

this, it's just my gut feeling is that.

When you buy a new Eva,

I'm contest by magazines.

The richer the magazine,

the more expensive it is.

Like the more it's it's

addressing the richer clientele.

The simpler the designs are.

Yeah, they can afford the paper.

Now The thing is,

space doesn't cost any money on the screen,

doesn't cost you any money,

and having it pared down and

simple and well ordered gives

you a feeling this is rich and

this is 4 sophisticated adults.

Whereas when you chat it

up with every typeface,

I'll go into typeface and color

and pattern and everything else is

slight and particularly thinking

in terms of Fe in your students.

It's a bit like early Learning Center.

Yeah, it's childish.

It's childish,

you're treating them as if they

are five and you need to go woo,

you know, or jazz and stuff.

Actually, you know.

It's is HIPAA is cooler,

that's why the big companies are employed.

Graphic designers.

Yeah, yeah,

nothing here.

Yeah, that's really interesting

point Naggers again,

thinking back to work I've

done as a new teacher.

You and spend hours looking for the

right PowerPoint template and bubbles

in the background in this at any other.

Actually that's more detrimental.

It's better and more effective

to be more clean cut.

It might be a.

An age thing you know as you get older,

you spend a bit more time.

You step away from that,

but you're absolutely right in terms

of it's not about entertaining.

It's not about making it look exciting.

It's about being really effective,

but you can have those other factors

was making your your visuals clear.

An iPad user exciting.

I would say this is a general rule.

I don't think I've ever

seen this contradicted.

For teachers or any graphic background.

Knowledge skills,

the more you want to entertain

and and make it exciting,

the more you want to do.

That is a direct relationship.

The worth.

The result will be.

So the very effort to do all

that makes your result worse.

That's interesting,

and I think obviously we've talked

very briefly to add some more points.

Our own kind of tape,

face and so on and so forth,

but I think for any listeners here,

we're really interested engaged by,

so I'm going to deal with the

three key things you need to do.

Firstly,

is have a look at some of

your work on Twitter.

You know you kind of your Twitter handle,

you know,

feel strange seeing that term

handle is Ali Cav or LICAV.

The second one is grab your book.

Your book is really interesting.

It brings these four key terms.

And much more to life

in terms of gives lots

of examples that give lots of

hints and tips and methods of

how you can do this in practice.

And then the third one is really

come back to these four key points.

And keep things really simple

and just kind of live by those

in terms of cut chunk elenin,

restrain yourself and try things.

And again it's like anything and

I'm sure you agree with this.

You're never going to pass this on a

single master pre forever, but you can.

You can tweak and continue to

weaken and see what's effective.

And again I'm keeping your

thoughts on this already,

but specially now in the world

where we flipped online.

I think it's even more important

to be articulate,

to be clear,

to be concise in the content that

we are sharing with all learners,

because the typical opportunities

that we have to converse to support

that learning have been reduced a

little bit more so it's even more

important to be more explicit and

articulate in the images and in

the content that we're providing.

So I'm not sure what your thoughts

on that as well. Yeah, I do, I do so.

I need to say something immodestly.

And over last two,

2 1/2 years teachers have been.

Going on my website they read the

book and they have got cut chunk

aligner re strain at the forefront

of their minds and despite me

trying to encourage teachers for

the last 3035 years last two I've

seen an utter revolution.

Absolutely not a revolution.

Remarkable work by teachers people

who with no graphic design background

producing crystal clear exciting

because it simplified not exciting as in woo.

You know,

over overfill,

complying with your coding and

with cognitive load theory's.

But you don't need to know any of that,

it just looks like wow,

here's a real professional,

they really know they've handed

it over to a design team and

they produce all my slides.

That's what it looks like,

and The thing is what teachers find.

First of all,

you might think I'm going

to have time to to do that.

I'm going to characterize,

but from what I've heard of teachers

his Watsco they do a PowerPoint slide

and justice use just as you say they go.

Oh, they have to design the slide.

Every single slide is designed in a

sense of oh should I put it left or right?

What colors?

What patterns?

Oh,

let me go and search for typeface

and they do that for every damn

slide takes enormous amount of time.

You spend some time using the gridlines.

As I say designing.

Say two or three slides that are you.

Your color palette really reduced.

Two typefaces,

and I'll talk about it in a minute.

Two typefaces and job done.

So Grid allows you to do is all

aligned but infinite variety,

as long as it's an aligned,

it's still grid based and then

there are almost no thinking matter.

Let's just becomes a habit and routine

and it's like you know when it concerned

about creating public speakers.

Teachers want to try and

make it engages the candy.

We spent a lot of time on it to make it more

engaging for students was actually just,

you know, go through this process

of training and reflect.

And again, it's just even.

Don't let it get you.

He treats and aspects that you

shared from other colleagues.

You know.

It just looks very clean and clear cut

and they say it looks like a bit of

information that you want to pick up,

and if it does that to us and they

will do that for large majority of

students there as well, you know.

So it's really,

really interesting in the absolute

rate it's around, I think.

If we realize off we perceive that

this is important, we make time for it.

Say anything like this is important

and you can see overtime.

This has significant benefits for

your learners and in terms of their.

Aiden their retention of information,

recall of information and absolutely

just another tool in our locker trying

support and aid learning from all owners.

Yeah, so typeface.

As well, albeit you know there

are two types of typeface.

Because French is my first language,

I'll say it in the way I found natural,

and I'll say I'll anglicize it.

So serif and sans serif,

serif and San serif.

What it means is San Serif is blocked.

It's like a right angled

on the edges rounded,

but generally the the Siri

fizzy the old like Times Roman.

The bits that stick out on the

end the the little curvy pointed

bits which were designed so when

they cut letters into stone they

didn't crack because I mean having

worked education for 14 years,

I've never known that before.

I've never had the operator to

look at the difference between

surface area so that interest and

or So what does that mean for us?

Generally when you're doing.

When you designing for screen is

better to use sorcery for blocking

one becausw although screens you

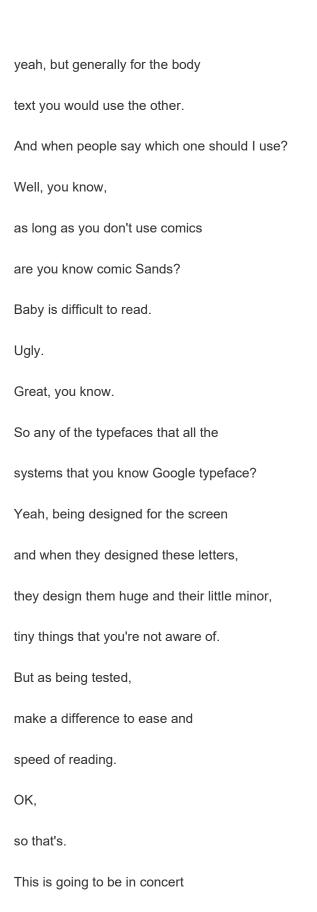know Apple retina screens are

much better than they used to be.

The resolution isn't as good

as printed on paper.

So so.

You don't have to exclude those,

so they'll be fine for a big title,

yeah, but generally for the body

text you would use the other.

And when people say which one should I use?

Well, you know,

as long as you don't use comics

are you know comic Sands?

Baby is difficult to read.

Ugly.

Great, you know.

So any of the typefaces that all the

systems that you know Google typeface?

Yeah, being designed for the screen

and when they designed these letters,

they design them huge and their little minor,

tiny things that you're not aware of.

But as being tested,

make a difference to ease and

speed of reading.

OK,

so that's.

This is going to be in concert

take place, 'cause it adds a learner.

It is a speed of reading and it can

removes any potential barriers there as

well or reduces interest and not in.

Obviously you central cannot

advise and they want to use.

What are the types of typefaces that

you do use that I've got no doubt.

Some lessons will want to kind

of know that what to take.

Faces you using your your

books or your material.

Well I use a typeface that I pay for right?

Yeah and that's part of my

branding so no one else uses it.

So it stands out there.

And so that's I mean,

I'll tell you what it is,

clavicle, but you know you

don't wanna spend £200 on it.

You know no, absolutely not.

Again, I know I think you've identified

some before that are free and available.

I made that up over or have you

shared those as part of your?

You really don't need a list,

you just need to go and you could Google

it or just you know you have aerial.

If you got Helvetica the original use

that you know this will sound better.

You can't get classier than that.

No, that's great.

I still remember Colibri is designed

for the screen,

yeah?

So that was really interesting,

and it's yeah, well,

we talked quite a lot there around

different aspects and how they all.

I guess all draw together because yeah,

obviously initially will talk

on dual coding their own,

how using visual with written of a verbal

to hear that retention information,

but all these other principles

absolutely feed in there and drawing

and hopefully reduce the cognitive

load and allow for greater learning.

And I know we can touch upon towards the

end some of the current work you're doing

with Tom Sherrington around the walkthroughs,

so I'm keen here.

But mobile that early, yeah well.

Tom's own or run the world and he and

I collaborated together and tried to.

Well, we did.

We applied all these principles,

so here are the problems we faced

with learning where for teachers
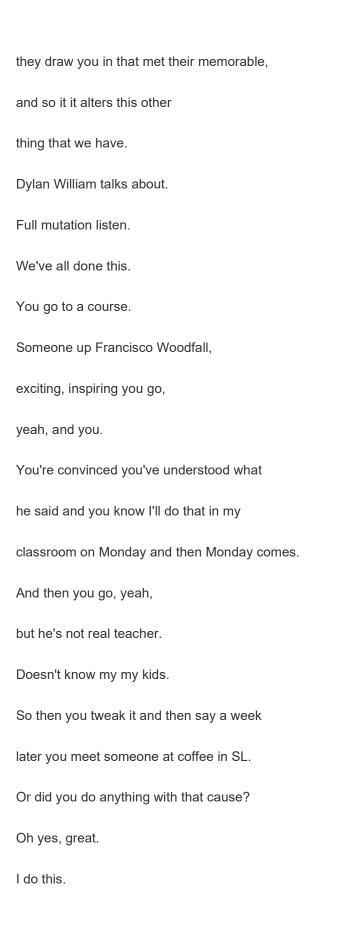
learning techniques they read

books and they're all narratives

and good stories and theories.

But actually they don't tell

you is boom Boom boom teachings,

practical teachings physical you

do stuff if you don't do stuff

you're not teaching so.

We just need to make it really, really clear.

And we need to break it down.

So bearing in mind, cognitive load, every

technique is broken down into five steps.

The last thing you want to do

is pick up a nine step process,

find yourself in a classroom thinking

you've learned it and all of a

sudden you got what comes next.

So five you can remember 5 steps.

So Tom is a brilliant writer,

really crisp, so they'll be

wonderful examples of how to do that.

And I illustrate every

step so it's memorable.

The words in the images in

that they they are engaging,

they draw you in that met their memorable,

and so it it alters this other

thing that we have.

Dylan William talks about.

Full mutation listen.

We've all done this.

You go to a course.

Someone up Francisco Woodfall,

exciting, inspiring you go,

yeah, and you.

You're convinced you've understood what

he said and you know I'll do that in my

classroom on Monday and then Monday comes.

And then you go, yeah,

but he's not real teacher.

Doesn't know my my kids.

So then you tweak it and then say a week

later you meet someone at coffee in SL.

Or did you do anything with that cause?

Oh yes, great.

I do this.

I do this technique and then Jenny

listens to me and she goes, yeah,

but all is not only is not a

very good teacher, so I'll just.

Tweet that bit and after four

such word of mouth,

you've lost all the main bits.

So here it's really.

It's memorable, it's simple and

everyone knows what we're talking about.

So you get a culture where

the language is the same.

The understanding is the same.

Of course.

One thing we did build in is

that there is no one answer.

But we have to have this basis

that we talk about and then a

really important thing is we

gotta every every technique.

We advise you.

You adapt it.

So in other words you try it,

you tried it out,

you tweak it so it suits your subject,

your students,

so that weighs individualized.

But everyone has got this common

notion of what it is now.

I think it's really interesting and again,

just drawn back to those

fundamental principles there of,

you know you're applying the

principles that we talked about for

last 40 minutes within that book.

In terms of for the reader,

but also in terms of how we do that

in practice, you're absolutely right.

You know a an approach or

principle won't work in the same

way for everybody it's about.

Readers take that ownership and autonomy,

applying it in world and kind of

making it fit for them was drawn

back to the fundamental principles

of of whatever they're trying to do.

Yeah, you want to avoid oh,

we're all different.

And then everyone's inventing

things that really efficient.

And of course,

even if you invent something great,

it all disappears.

Yeah, so you want something stable

around which innovation can happen,

but we cannot have conversation.

So in college you can have someone

who's doing horse husbandry can talk.

Someone is doing a level law.

They're using the same techniques,

but they're they're applied differently.

So they have great conversations.

And again, that that's a big bit of work

I'm doing currently across Scott sectors

around just providing spaces for people

to collaborate both within subjects,

but also the subjects because for

that reason you know it's not going

to sharing the learning with each

other in teaching is teaching how to

apply in different ways of different

learners in different colors.

But the same fundamental

principles and how we apply that.

So the second book eliminating is out

towards end of March in terms of teaching.

Walkthrough two. Yes it is.

Yeah, if you go to a website.

Walkthroughs at my teacher mother would

slap my wrist through HRU American I sorry,

walkthroughs.co.uk yeah,

you'll see that in addition to book we

have some materials that that you can

buy so you could lead all your training.

You got all the PowerPoint slides

that go with it,

designed in a way I talked about and

you've got trainer notes so you can

lead it or whatever departmental level

or whole school or whole college and

they got workbooks and sheets for.

Plus the style,

so that would that would pretty

much do all your CPD needs.

So do not look fantastic.

No really interest in 45 minutes,

you know.

Try and keep this podcaster 30 minutes

after we have condensed into 30 minutes,

some really interesting points

there and next just imploring

listeners to kind of look at.

I just have forwarded it to handle

just to really understand the visual.

Say that we're talking about.

That's one bad thing with the podcast

is you can't get any visual examples,

but the visuals that have been

produced exceed by yourself and

by colleagues in the sector.

The really,

really clear and concise and it

kind of brings to life all the

principles we talk about here.

But also take a look at those books,

and so the dual coding book,

but also the walkthroughs book as well.

Because yeah,

I think we're all consistently

learning and develop our practice.

And here's some fantastic resource is

that will allow us to do that as well.

I think just one thing,

if you don't invest a lot of money,

then the walkthrough book is

actually on Kindle.

It's on.

It's on an ibook as well by the

Kindles just £3.00.

So you got nothing over 50 techniques for

£3.00 for that type of Costa Coffee is not.

You know what on proving our practice

improving practice of colleagues,

you know that's cheaper Costa Coffee,

so it's absolutely way to go.

Well, thank you very much.

I really appreciate you and Barbara list.

Thank you for coming along kind

of sharing your ideas today.

Cheers thanks Johnny.