

Pedagogy Matters: Episode 7 Transcript

Hello and welcome to the latest episode of the Pedagogy Matters podcast.

The purpose of this podcast is to bring to the fore some key topics of conversation in relation to learning and teaching to discuss the breakdown aspects of practice and provide snippets, advice and guidance as to how we can integrate these into our daily practice today, I'm delighted to be joined by Christine Calder, academic Development Leader Dundee and Angus College, and today's topic is focused on action research.

Christine, welcome. How are you?

I'm alright, thanks,

given everything that's going on,

I think we're all just battling today.

How are you doing? Good thanks.

Will consider 11 months in in the appears

to be an element of a vending site.

Now hopefully it's positive.

But yeah, it's really interesting

that account chickens too soon.

So today we're talking about another

topic which is very dear to your

heart in terms of action research.

So I think it's probably start with, I guess.

How did you get into it?

And kind of what it what is action

research mean to you, Christine?

I think, um,

one of these things is I moved into

the world of professional learning,

back merger time when a lot of the

colleges in Scotland merged, and.

Started the day of more and more

and professional learning and

deeper into professional learning,

which is part of my job is

a large part of my job.

I came across the term

action research and be me.

I was like,

I wonder why that is and started to

nosey around start to read a little

bit about it and and and actually

over the years got in touch with

couple of people down in England who

were incredibly strong with action

research and have research networks.

I am going so ultimately that's

kind of read it.

Kicked off from but actually.

I went down,

was lucky enough to go down to to

Manchester to actually go to one of

the research meet and speak to lots

and lots of practitioners who use

action research regularly annually

just to push their own professional

layer and then actually get the
benefits out there for themselves.

But for the students,
for their colleagues and so on.

It's just.

It was a piece of the jigsaw that
was kinda messing in my opinion,
and that there's a lot of people
maybe doing something similar
in their own practice,
but maybe not with the framework etc.

That's needed behind action research to
give it a little bit more rigor much.

I know we'll talk about and then
we went to a, but yeah, it's just.

I find it so inspirational that I
started to use it myself and I thought well,
family is going to have to promote it.

I I better dip my touring as well and
it has transformed my own teaching practice.

I'm over the last few years and

and just purely by word of mouth
and speaking to people around the
college. Others have sort of trial to
as well and it has had great benefits.

Yes, and you know.

I mean tell you to very much inspired by it.

I think it's just start with what
actually is action research.

What is it? What does it mean?

What are those two words mean?

I think that's the thing.

It's like there's two words there,

and it's also known under 100

and one other terms as well,

so you might find people talking about

practical inquiry or practitioner inquiry,

and again, just to be clear,

if we talk about practitioner is not

necessarily talking about schools,

it's something with an education setting that

practices the craft of teaching in some way,

shape or form.

So lecture I might be called

teacher research.

And again, the word teachers

interchangeable and evidence informed.

Will talk about whatever we're doing.

We want it to be evidence informed and

it's the same kind of thing we design.

Every things come from the action.

Research is 1 one major

place that it can come from,

but for me the key thing is the

word action is personal to me.

Therefore the action happens in my classroom.

It's an area and as a classroom,

but I will say this though it

could be my gym polka dots,

yet like transporting fitness,

it could be a workshop.

It could be any practical

area studio and so on so.

But the actual action happens

in the classroom, and yeah.

It's about the craft of teaching,

so it's very,

very personal to me.

And then the research side is in there

and I often find that researchers are scary,

but for a lot of people,

absolutely it doesn't need to be.

So we started calling.

Let me search with a little RA or started

to run and talk about action research.

We talk about a do you want to

enhance your teaching?

Do you want to experiment with your

teaching and start to call it by

something slightly different to

get away from this term research?

And actually all the research,

but is.

You know,

trying something written about

about it and then trialing it

by any is a little bit fancier

in the background if you like,

but it definitely involves that

experimentation with something

around the craft of teaching.

So just those two words can be

broken right down into the basics,

and I think in all fairness,

anybody doing it might,

after one or two runs at it, go.

Yeah,

it's quite a grand title action research,

but actually it's we've all

done it in some way,

shape or form already and then.

Put it under the term of action research.

We just give it a bit of a framework

that can people can follow to give

a little bit more rigor behind it.

Nothing that's really interesting is,

again, you're absolutely right there

in terms of when he returned research.

I think, wow, that's big.

That's scary.

It's gonna take a lot of time.

A lot of information or resource.

But actually, really,

it's around and within limbs terms.

Look at elements of this trial and error,

but that's how people do

with part of the practice,

but maybe formalizing that a little

bit to have a real purpose to try and

have dinner and overarching impact.

And I think that then leads onto

the way, so why?

Why do you believe that this is important?

Or why does a sector and other colleagues

believe that this is important thing to do?

I think it's growing in the sector for us.

I do think it's growing.

I think it's got police to grow as well I.

For me.

I'm a lecturer at heart.

There was a PE teacher and then I
moved into the Lake during world and

I love the teaching element of it and.

The world's been so bonkers for the
last while so much out of our control.

And it's that sort of a.

What can you actually can control?

I can control what happens in the classroom,
so therefore it's a reflection on me
as a professional and I want it to be
the best it possibly can before me.

For my career,

I could be in this career for 3540 years
and it's quite a lot of time on it.

You never want to stagnate,
you want to keep going.

You want to keep yourself enthused an

otherwise? What's the point as well?

If you're going to be in the job that long,

you gotta keep yourself current,

but also for the benefit the student.

So no matter how many students

come through your doors.

You want experience to be

inspirational to them.

You want the experience to really

grab them and for them to get there.

The joy of coming to college and

the joy out of actually, you know,

learning about this subject that you love.

So I think that's part of it.

In the background is maintaining that

enthusiasm yourself and again at that

idea of professionalism and the.

You know professional identity

side of things.

So as a lecturer I absolutely am.

I love the job.

I love being with the classes.

I I love learning,

teaching and I love the subject matter and.

Stuff that's fantastic about the job as such,

but actually in order to feel

that I am involved in it,

I'm not having so many things,

so many policy etc.

Applied to me in order for me

to be part of that,

that whole scape or for the

whole scope of further education.

The college world have to be involved in it.

And this is one way for me to get

involved in it rather than just

have somebody coming along soon.

Or you must do XY zed.

Actually even reading some stuff,

reading some literature,

reading some whether it's blogs.

Whether it's.

Bigger pieces of research,
but actually being able to go
to know something.

I recognize that in my teaching
and my workshop,
or a recognized that and the
way I am with my students,
or actually having the ability
to go not disagree with that.

And it's OK to disagree with
stuff that you've read to go.

I disagree with it,
but the main thing is the reasons why.

What have you seen that
makes you disagree with it,
and that's fantastic that
critical passwords but critical
stance on the literature or
whatever you're reading about is
absolutely key to action research.

I'm on for me is key to

being a professional lecture.

We're absolutely allowed to be

critical and by critical within the

positive and the negative of what you

see in what you're reading and that

as long as we are engaging without

literature and actually taking away that,

that stands,

that that agreement or

questioning it a little bit,

and then we can take it interaction research

if we think there's something wrong there,

something we can adapt.

This is our own individual way,

maybe starting to just.

Put it out there when we get

to the end of the research,

that will actually I disagreed

with something I've trialed,

something I've come up with a great

result and put it out there for other people.

Maybe to read about or to talk about and.

That's how that's how change happens,

and we think there's there

were 5000 lecturers.

And in colleges in Scotland,

that's a lot of people.

If we even harness a few people doing

that throughout Scotland, that's a voice.

That's a college voice that's electrovoice

making an impact in the absolute right.

There. I'm looking at drawback

to a couple of things.

You said no.

So fundamentally,

it's to improve your own practice and

improve the learning of your learners.

And I think another point

you mentioned around,

you know it's a mad world

analogy is quite a bit.

There's a lot of noise out there.

You know around what is effective teaching,
especially in the online
world around breakout rooms,
quizzes,
forms,
this of which is some
really effective practice,
and I think just a drawback
in the purpose action.

Research what you're seeing there is to
test things to find out what works for you,
and then to share that more
broadly to go through a process
of trial and error to reflect,
to try and inform yourself,
and trying to inform others.

And you're absolutely right,
going back about 5 or 6 minutes,
you talk more as a real drive in a real
clamor for evidence informed practice.

And I'm gonna sit to the average

lecture who might not have really

been in this world before.

You know, as a term of sport,

run marginal gains,

how can you improve your practice

by 1% of the time and this may

just be an example of how you may

well do that across certain topics

around reading the researcher or

trying to improve elements of

your questioning islands of your

modeling or effective instruction.

I think it's fair to say that action

research is just the method of semi

formalizing or formalizing that air of

interest for yourself or under the sink,

and understanding what worked for them.

And using that to inform your future

practice is at the end of the waterway.

So now for the easy question,

Christine, how do you do it?

It's a really important,

so I'm not thinking right.

I've got a lot of great ideas.

I want to test. Test my teacher now.

This action research.

How do I do it?

Well, I think this is never made a broadcast.

This is like we've been here

for couple of days or no.

In all seriousness,

I would say family is wanting to do.

I would read a fair bit about and

there's lots of good things on YouTube.

Jean McNiff is a amazing with action.

Research is just lovely as well.

Maybe I did meet her once and there's

there's plenty out there and there's

plenty of frameworks out there,

but the one that read a fair bit

now and the one that kind of

child is that first and foremost.

We are professionals and

we knew our teaching.

Better than anybody else.

Somebody walking in the classroom?

Get snippet your line manager.

Here's what each lecturer has

to say about their own craft,

their own teaching.

But actually we we don't control of it,

so we know where there are

issues with like this off.

So the first thing is probably

to identify a problem,

and that might again always based outside,

always based on your own personal teaching.

I so that is very meaningful to

you and the students get their

forget the benefits as well.

So identify problem something

that maybe needs improving.

I'm kind of run through the example

'cause I was thinking of it beforehand,
so Dad went away or back and.
I taught anatomy and the students
often came in with a bit of our fixed
mindset around anatomy and I can't do that.

It wasn't good at it's cool,
and so on, and there's lots closed
book exams in anatomy,
maybe 5-6 weeks worth.

Close book exam,
5-6 weeks more teaching closed book exam
and it kind of struck me afterwards.

Speaking to the students quite often
they were like I knew that answer.

I just couldn't get it out.

I knew that and I've spoken
to them before the exam.

Support them after,
but something just wasn't clicking for
them and so for me that was a problem.

I so read up a little bit more

about a whole host around retrieval

practice and how to help,

or how I thought could be

possible to help the students.

Getting a better place before the exam.

I didn't think there's gonna be

too much would change around

my own teaching as such a.

I just thought there's something

I could do to help them.

Had spoken to the students

beforehand in previous years,

Cutlass for many, many years and in

previous years and they very much

wanted fairly directed way of teaching.

They didn't want to go down cooperative

learning and they wanted to be told

because it's too big a deal in their

their words that they got this wrong.

So they wanted to be reassured that somebody

knew what they were talking about was

standing in front of them taking them.

Do that, which is fair enough.

They so readily,

but about sort of retrieval practice

and so on spoke to the students

actually wanted them involved in this,

'cause they were doing their

own research unit.

So nice to get them come along in the

journey with what I was thinking of doing,

and we agreed that actually let's just

do something straight before the exam.

Charming doesn't get a good name,

and it's not coming because all

the teaching and all this other

stuff was done well beforehand.

But actually what we did is give them 45

minutes half their space to do a quiz.

Simple as that before the exam.

It would take them through areas that we

knew that they struggled with in the exam,

but also some of the commonplace side
of things I and that was that was
with my reading right now through my
literature getting bit critical about it
going actually common gets a bad name,
but this doesn't necessarily coming.

This is just looking over.

Notes right before the exam I.

Then took it back into my own hands and
started to look at my objectives to go.

What do I really want to get from this?

And again,

that the whole idea of getting clear
objectives was absolutely crucial.

'cause he goes down the rabbit hole
and you come over something completely
different than you started with.

So be clear with yourself.

Of course you can be flexible,
but if you start to change objectives
at that point,

I'd go back to the start again to think

about what actually is the problem

and have a read or watch YouTube

and so on about the right areas.

So next stage was clear objectives.

And it really was about what

I'm trying to find out.

Drilling right down into what it was.

It was the real real crux of the problem.

I keep it as simple as possible.

Next stage was the evidence

was going to be helpful.

What can I start to use in terms

of evidence that would allow me to

improve practice but a ethics and I'll

get back to the ethics in a repair.

But the evidence that I could use

to also see if there has been

any improvement or not for me.

I was looking at that stage to still have

previous years results of these exams

and also be looking at this current year.

So that was a little bit of the

quantitative data that I could use,

but actually.

RIM for students.

So we could really,

really,

really rich qualitative data

if they want to talk about it.

I know there are other ways

to get qualitative data too,

so that case that's the next stage was

this gathering that evidence actually

trialing it and seeing how it goes?

Picking up all that qualitative

and quantitative data?

And again, it's not.

It's not like Master research

is not PhD research,

it can be quite like touch,

and that's OK.

I'd probably say that's really

crucial about this is absolutely OK.

'cause this is done alongside and.

During your day to day Job doesn't

have to be massive 'cause we've

gone through the process anyway.

I am. And then it's evaluate.

So for me,

when I started to look at the differences

between after we got gotten here.

So the differences between previous

years results and this year's results

were particularly brought in a quest

beforehand that it was quite amazing.

Quite amazing that all the

students about this is.

We also had two previous years

results in there very similar,

and then this year, for instance,

percentage wise it went from

25% on a full reset down to 1%.

So it was quite for me that

was an absolute gobsmacking.

My goodness something has worked here again.

That yes,

there are variables that absolutely

are variables, but regardless,

it was like something really,

really nice has happened here.

An actually the remediation rates went

down as well from 23% down to 19%.

So in all fairness,

I was like it was a wow.

This is this is really positive and again

they probably the last stage for me would be.

Implementing changes absolutely for me.

There's no that was two years ago that

that we piece of action research.

Brought up, shared it with some colleagues,

but actually I implemented those

changes and have not gone back since,

and that's a key.

But you know, it's so she first was bottom.

Proving your own practice for your own.

I think we said towards start

with kind of of the podcast,

but it's interesting points

there and obviously.

It's important that as as lecturers

as teachers, we do this anyway.

We consciously think.

How can we teach better?

How can we?

Have an impact on certain metrics.

Obviously within our gift

this time which we can do,

so I guess drawing from what you're saying,

then the process of action research

really just formalizing that and

making a more conscious, more explicit.

And it's interesting.

He said then terms of at the start.

Think about the why and the how wonder what.

So what do you want to find out?

Again with teaching you can be

as much as you want it to be,

but really important drawback

to something quite tangible that

you can measure.

Distance travel isn't in some respects,

ideally exam grades.

And yes, as you alluded to rightly.

There's a lot of different

variables that could influence us,

but I guess the more you do this,

the more then this becomes more accurate.

To understand the impact of

these things that happen.

And then there was interest rate.

You said that towards the end in

terms of then shared the strategy

great might not work for all,

but it's useful for other people to know.

Actually, he isn't here

somehow worked for me.

This is how This is why there's evidence

that that that's really important to us.

Being reflective practitioners.

I think it's really interesting,

and then I know a lot

of people business well.

How do you draw us together?

So what do you do?

What is the Action research report?

Look? Lakers aura set.

We are one of the themes, so don't you?

Thoughts are on that.

Let's say there's this.

There's 101 ways to do it,

and something that always talking

about him to be share practice.

How do we share this good practice and?

Back down to a Ashton college.

It was an England and they had this

whole EFI research mean fantastic

where lots of practitioners from
different areas came together for
a day and actually just showed
each other what they had done.

There was a couple of key speakers and so on,
and there is well,

it was really really enjoyable day and
I think for me it's purely because it
was all about learning and teaching.

Actual learning and teaching stuff
that you could come away with and go.

Oh, I'm going to try that.

I think that's built into me
and it was just like.

That might not be from me,
but my God was interesting to
hear that person's experience.

So there's a few different ways
some people got on the presentation,
and all those brought along a poster
where they just condensed all that

information and they put the posters

up and will be available for a chat.

There was a lovely little speed

dating session set up as well,

where you kind of had the headers

and you could go and speak to

people as and when you want it.

So let's say there's there's

loads and loads of ways for me.

I wrote it up into a kind of poster

presentation that I gave to people

if they wanted to look at it.

Gonna give it a couple of colleagues

who actually were about like this.

It didn't race.

Then I'm going to try that and not

maybe think it was like six months

later I call it came back when I

tried exactly what you did and it

worked for me and I'm going to keep with it.

And again they didn't have to go through

the kind of the same process I did,

but they just they just creamed

off the benefit there and they saw

the positive results from that.

As we say it don't work in every Department.

Our students are very different,

but it's certainly something that.

It's not.

I think that's one thing for

me about action research is.

I forget the ethics right?

There's going to be benefits all over

the place and there will be no detriment.

And that's something that I would see

it as you head through the process.

So there are various frameworks

we can follow out there,

but I would say guitar.

Most college will probably have a

group of people who are interested

in research and active research

group and some that have got really

research expertise in there.

Get him involved, get them to think about.

The ethical side of it,

so I think I think thinking about when

we look at bigger research and action

research is there's a power dynamic.

We're doing it in our classroom

with their students,

who would ultimately assessing social

definite power bonds that we've got

to talk about their eye and therefore

the ethics are quite crucial.

So focusing on ourselves first and

foremost helps there definitely helps her,

but there is a beat up to British

Educational Research Association

have ethical guidelines for.

All educators until their kids starting

point to have a wheel account and get

your head around eye and this sort

of who needs to know in your college

and who needs to kind of prove it.

Not necessarily saying that they'll get

mad like if you go to University today,

PhD, there must have a approval process,

not like that,

but more than likely most colleges will

have a a bit of a proposal paperwork.

Nothing too lengthy, just what are you doing?

Why you do not want your reasons?

What ethical process will be

taken into account?

Have there been any issues that you

think you might encounter and what are

you going to do to make sure this?

Not detrimental to the students

to colleagues and so on I guess.

Important point to note there

on the ethical practice that

considerations because yeah,

that's a real pertinent

point in relation to this,

and I know from speaking lectures in my

experience in the past in different colleges,

there's often a cynicism towards

this innocent in all actuality not,

but perception of.

Well it's gonna take me more time to do.

It's going to you know why would I use this?

Actually, as a practitioner,

roles involved in our practice

anyway and surely makes sense.

I've tried and tested method that

works for others that informs your

practice and I'm going to be really

going to lower the tone right

now and use a tick tock analogy.

Now my daughter enjoys Tik T.O.K

as is most young people do,

but I guess it's a view of you see is

really quick 1520 second videos where

the perfected a recipe or perfected

in a really unhealthy breakfast.

I'm not gonna say that action research,

but it's similar sort of principles

by someone's got out and tried

different methods.

Then you'll go pick it up and

use in your practice.

That's exactly what this is,

but really, to help make us.

More effective, better teachers.

And it's a really interesting point is again,

as a practitioner,

I didn't really get involved

as much as I should have,

but I think it was more because

it wasn't as prevalent.

And I know in Scotland you're heavily

involved with in a research network receipts.

I don't wanna talk a little

bit about that now as well.

In terms of Ken,

so if you don't make it any better,

what can is and what that means

and kind of what it's all about

really will be really helpful.

Sure, well myself and a couple of colleagues,

so that's a Patrick O'Donnell from

Perth College and Kevin Brosnan from

University Sterling I I've been

working on this for a couple of years.

To be fair,

there's been a massive gap in the market.

In terms of literature we talked about

in terms of anything that really can't

influence what we do in colleges.

In Scotland I there's been

conversations all over the place

about what policies have been

written specifically for colleges,

and quite often we find that we are.

Ultimately.

Following a policy that was maybe

written for schools or maybe

written for a particular area

that not necessarily for colleges

because each college is so unique

and so different and so he's got

some conversation started about.

Well, actually,

where is the evidence in the

background around colleges?

Where is all this literature?

We it's not really anywhere or

it may be totally interspersed in

various journals are behind paywalls

that actually the average college

lecturer and manager can access.

So who's going to do something about it?

OK, well nobody.

Unless we do so there's the whole action

research side of things coming in.

Again,

it's about over practice over sector,

so let's actually maybe try and

do something about it.

So Karen was created.

So colleges, action inquiry,

research network with a

lovely arcanum much easier.

I but say yes, so it was created and

spent on me while talking to people

and thinking about how this could

best benefit the college community.

So ultimately what we've got is a

Journal and it left a little get

launched at the end of this week.

So it should be out there for a when

pedagogy matters, goes live and.

Couple of Meanwhile couple

drivers behind it was.

Everyone goes through or if you're going

to the college and you're not qualified

lecturer for the line and teacher,

you're going to go through your teaching

qualification and further education and.

I've been involved in helping

to deliver that for seven years,

six years now,

and some of the essays some of the

work that goes on and it is based

on inquiry is based very much on in

action research and in some cases,

but the work that comes out is

amazing and who gets to read it.

Nobody just gets popped in a draw

an actually we owe it to everybody

in this sector to actually make

these kind of things available.

If the person wants to share it.

So that was one big reason behind

here and there are people doing

Masters and PHD's and.

You name it,

the the work is so specific

to the Scottish sector.

We're not the biggest sector out there,
so because it's so specific
and into that niche area.

Actually to get a big publication to
look at you, it's gonna prove an issue,
but the work is fantastic,
but it's maybe not going to get
published in an International
Journal because it's so niche market
for Scotland and a curriculum or
our particular citing regional
areas one so forth.

So Kim would be an ideal area there.

So what we've done is created.

This network at the moment we're
starting with this Journal,
which as I say,

launches at the end of the week
and we've got a whole host of.

Different types of article in there

and that we've got one and one that's

going to be incredibly popular is
something as simple as it is about
crosswords in chemistry and the use of them,
and it is about that practice
will benefit students.

And as I had a sneaky peek at it
beforehand and it's just, yeah,
it can rock practitioners world.

But Karen itself isn't just
for practitioners,
it's for the whole college sector.

So there are elements in there around
for this particular edition around,
say, libraries.

I'm about after I think I've talked my
head about reflective practice and so on,
and again,

that's something that's a key,
and in particular is this looking at?

So we're looking at a variety
of different types of articles,

so it doesn't all have all have to

be research based articles that are.

Different few different ways.

I'll do better plug a few

different ways to get involved.

And ultimately, that are things like

reflective articles are fantastic

and particularly people who may be

transitioning from different roll

to roll or coming into the sector,

or maybe even moving out of the sector.

Anything that's really affects

the Scottish college sector.

I were looking at things

like book reviews as well.

So one thing talking about literature

is that what ones are really key to us?

What ones are really relevant

doing about anybody else?

I don't have time to read all the books.

I would like to read, but therefore

if somethings recommend and one.

And through a bit of a critical book review,

I will.

That would be really relevant for me.

FOB or in my possession.

I'm good.

I know who that would benefit a

group of people who are doing the

qfe or some of my colleagues.

I can make that immediate sort

of recommendation.

So yeah,

there's 101 ways people could

get involved with care.

So few questions on that, Christine.

And so Ken.

So this is going to live at

the end of February.

General, how do I find this?

I'm Alexa.

How do I find out where I go?

You can go to

karenjournal.wordpress.com right?

Simple as that and it's there

to be honest it's like now.

So at any point empty can access that and

it will just be updated as and when we can.

And also one of the other things is

we've got a week Twitter account.

It's been fairly inactive,

but we expect it to be more

active and it is at Kia.

Journal and also,

we'll look into share this in the room

with kind of the release of this episode.

And then how do people get involved?

So they want to get involved with

you and the rest of the current team.

One of them is the contact via

the website and I was like,

well,

because it's all been done in our own time.

It's all been weekends and evenings

just to get this off the ground.

What we've got at the moment is just

a generic email address that one of

the three of us will pick up at the moment,

and we hope that Karen is going

to grow over the next while and.

People really are keen and getting involved.

Definitely give us a shout

whether that's as an author,

whether that's as a somebody would

like to maybe get involved in actually

helping to drive it forward in the sector.

Or maybe the people have great

ideas about what could fit in,

and they've got people that want to

recommend or introduced the care.

Yeah, just give us a shout.

No,

that's great.

And obviously from CDN perspective

will be supporting this moving forward.

Maybe do a virtual bridge is well coated,

bit more in depth as well as

looking at different events when

trying draw people together.

That kind of support.

The sharing of practice in love

completely conversations about

that as well trying for me.

It's a topic that's very dear to

my heart right now because it's

around supporting lectures to

improve and ultimately supporting

learners to enhance their learning

experience even more so you know,

it's a really fantastic little worth at that.

You and the rest of them are involved

with the next phase is a lot more.

And which is a lot more questions right

now as well because of the recent changes.

And obviously I'm sure some this

is aware that the serial numbers
of Research Center where we've
been looking at elements of this
more broadly across the piece,
but obviously from a learning and teaching
perspective it there's certainly a
lot to be interested in there as well.

Now sounds fantastic Christine.

So no doubt this will get lots
of interest and we can really
take this forward there as well.

But Christine thank you very much
for your time, and we really,
really interesting topic,
and I'm sure our listeners have
learned a lot there,
and even it's just kind of encouragement.

To pick up one Journal or can
it get involved in research?

Fantastic, that's what so ever.

So thankful tratame, Christine.

Thanks very much, Johnny.

And there we go.