

## Transcript - Karine George - How can we learn new behaviours at work?

(SFri, 04/05 16:13PM · 44mins

# **Transcript**

Ross G 00:07

Hello, you're listening to the Future Talent Learning Podcast developed to help you build your leadership and management skills. I'm Ross Garner.

Ross D 00:13

and I'm Ross Dickey.

Ross G 00:14

This week we're asking how can we learn new behaviours at work, what gets in the way of learning new skills and developing new behaviours and what are some helpful techniques that can help us learn at work.

Ross G 00:24

To explore these questions we're joined by Karine George, an award-winning educationist who for 20 years worked as a head teacher and is now an international keynote speaker and author. Hello Karine, how are you doing?

Ross G 00:34

Fine thank you, hello Ross. Welcome to the show. I wonder if you could kick us off by telling us why is learning new skills and practising new behaviours so important in the workplace specific.

Karine 00:48

Well, we've only got to look at the last few years to answer that question. The world of work has been disrupted by the onset of the fourth industrial revolution with a rapid integration of new technologies that have transformed and disrupted the way we live, the way we work, the way we communicate.

Karine 01:06

And this has been completely accelerated by COVID and has resulted in many organisations struggling to keep up with the rapid developments that have taken place. And this has been a two-fold problem, one for employers, which has meant they've had to prioritise training to fill the skills gap and to upskill and reskill their staff because it's making a difference between companies that will stay ahead of their competitors and survive and those that don't.

Karine 01:32

But also for employees, you're more likely to be hired, you're more likely to be retained if you're continually developing your repertoire of skills to meet these realities of this evolving workplace.

Karine 01:45

Now, this is incredibly important when you think about your career because in my time, most of my people in my time and my parents' time had one career from cradle to the grave. But for many students now, you're gonna have multiple careers.

Karine 02:05

And so you're gonna need this wider repertoire of skills. And I can give you some examples of students that I've had that have, are you happy for me to give you an example to explain one of them? Yeah, of course, yeah, yeah, absolutely.

Karine 02:16

So one young man that a student that I know, he started his work on the shop floor in a factory looking at skills of fabrication and welding, but he was keen to develop. So he moved to sales because he'd made things and now he wanted to take that into sales because he wanted to wind his repertoire of skills and wanted to develop further.

Karine 02:38

And that paid off because the same company then wanted him to join the procurement team. So he'd got the triangle, he made the products, he sold the products, and he knew about the procurement. He had a sort of great base from which to



### Karine 02:53

And the employers were keen, I heard from the employers, they were keen on continuing his development because he was self-disciplined and he was motivated to learn. And that led to him having a job in production, engineering, and then project management.

### Karine 03:06

And then one of their competitors then asked him if he would join their team, which was a different automation company, but it was robotics. And I remember asking the student, well, how did you cope?

### Karine 03:19

He said, well, it was out of my experience. I didn't feel I necessarily had all the skills I needed, so I had to take some training courses. But what I learned, he told me, through all the different jobs I had, there were two things I always did.

### Karine 03:33

As soon as I got some training, the first thing I would do is try and apply the skill I'd learned straight away, if I could. But the most important thing for me was to find somebody who, because ultimately you think you've understood it, you tend to apply it and you come across these roadblocks.

# Karine 03:51

So what he did is he always looked out for people who could question him, not necessarily give him the answers, but help him to think around some of the solutions so he could get around the roadblock.

### Karine 04:01

Now he did do extra training and he didn't pass all his exams. He told me all courses that he decided to take. Interestingly, today, he leads a team in research and development for cyber-physical systems.

# Karine 04:14

And the time period for him doing that, from when he started to now, he's 10 years. Now that's amazing, because he made himself employable by learning more effectively and developing some strategies that helped him to learn.

# Karine 04:28

So that's really important to us.

# Ross G 04:31

He sounds like a go-getter, he's super self-disciplined and keen to try out new things. I think for people who are listening to this and who maybe think, well, my job's fine, I like my job, I could do this job for the rest of my career, I'm not interested in changing.

### Ross G 04:47

It's kind of unrealistic at this point. It's difficult to argue that you're not going to have to learn any new skills, unless you are retiring, and I mean imminently in the next 18 months or something.

### Ross G 04:58

You are going to have to learn new stuff. I was looking back at how has the world changed in the past 10, 15 years, something like that. So a few examples. So one is the launch of the iPhone in 2007.

# Ross G 05:09

Very quickly, the way that we interact with every single company has changed. So last week, I tried to buy a bus ticket in Sardinia for one euro 90, and I couldn't buy it with cash. They wouldn't let me.

### Ross G 05:20

I had to download a specific app and use a credit card. Self-driving cars, absolutely inevitable at this point. We're going to see them on the road. And then the expectations around how long it takes for a product to arrive at your door and whether you have to pay for shipping and all that kind of stuff, like Amazon's completely changed that as well.

# Ross G 05:33

So every company is digitising its services and the way it operates. It's completely impossible to say that it's going to be no



further change in the next, even the next five years, something like that.

### Karine 05:43

That's important, but one of the things I want to pick you up on is you said about even up to retirement, you've got to learn it beyond. Because if I just think about my father-in-law, he's finding it difficult to access the bank because he still wants to use his checkbook and everything's online.

### Karine 05:58

So we've really got to think about this because the fourth industrial revolution is deemed the age of uncertainty with its new technologies that are coming all the time. So, you know, you'll read all sorts of reports that are likely to say that, you know, about jobs that are likely to go, about the skills that we need, because AI will flourish.

### Karine 06:20

The reality, however, is we just don't know. And Professor Rose Luckin, who is considered the Doctor Who of AI, suggests that these reports might be useful to us, but they're akin to sort of relying on a road map while you're driving in thick fog.

#### Karine 06:36

If you don't know where you're going, that map's not going to help. Better that we learn to optimise the strategies to deal with these changing times. Who would have thought before Covid that so many people of all ages would have been communicating or working or ordering that there were so many people who didn't even order their shopping online of a certain age.

#### Karine 06:54

They all had to do it because they had to get around the system. And so things that people took for granted, they're doing now, ordering their holidays online, speaking to their relatives across the world.

### Karine 07:04

Now, some people always did that, but there was a whole part of the population that didn't. And so these changing times have happened and they're going to keep happening. You know, cryptocurrency is here and you're hearing, you know, you can buy things at Subway, you can buy a holiday.

# Karine 07:18

I think even Amazon is starting to use cryptocurrency. I mean, Subway using cryptocurrency in some places. So, you know, we've really got to start thinking about this. And, you know, one of the things that's really important to me, particularly in schools and things like that, is we've got to remember we're educating for future, not for our past.

# Karine 07:37

And we hold on to our past. So, you know, whether we like it or not, we're going to have to think about this.

# Ross G 07:43

I think as well, one of the keys to what you said is that the shock of COVID and the sudden everyone's at home and so you have to get familiar with digital technology and so on. That was very traumatic for a lot of people.

# Ross G 07:54

It was very stressful using these tools for the first time. And I think it'd be unrealistic to think that there's not going to be any further shocks. So next time there's a shock happening, do you as a manager or your team, do you want them to be caught out and left scrambling to respond or do you want to take a proactive approach and try and prepare yourself for this period of uncertainty?

### Karine 08:13

I think that's really, really important and that's going to be the place people that succeed and the companies that succeed and those that don't and people as employees, whether they're going to be more employable than those that try not to try to avoid it.

# Ross D 08:27

Yeah, I think one of the things I liked about the example that you shared was that the young man you spoke about was a gogetter as Ross Puth, who's proactive in understanding where his gaps lay and finding ways to address those through training courses.



### Ross D 08:44

I think when people think of learning in the workplace, they often associate that with learning and development in some ways. You know, it's like taking a course and it's sort of the responsibility of the organisation to develop their people to make them ready for the challenges the organisation might face.

### Ross D 09:01

But I think what you've alluded to is that there's also a great deal of responsibility on the individual. And a lot of organisational learning happens on the job. It's not sort of necessarily always part of a formal intervention.

### Ross D 09:12

So I'm curious how you see the kind of shared responsibility of the organisation represented by LND individual managers and then also the individual team members that are working underneath that manager.

### Karine 09:27

Right. So I think that we have to take responsibility for our own learning, because, you know, especially once we leave education and enter the workplace, because too many people are passive consumers of training and it's a major, major obstacle to learning new skills and behaviour.

### Karine 09:44

You can't wait to be spoonfed by an employer and then complain that the organisation we work for isn't sort of meeting your needs or enhancing your career opportunities. You've got to remember that companies are going to offer training courses often, well, often they do, and these can be interesting, they can be fun, they can be useful networking opportunities.

#### Karine 10:02

But if you don't then try and apply that learning into practice, the majority of what you've learned is going to be lost. It's like trying to sail around the world, having been on a one day course or read a book, you've got to do it more than once and you've got to find your ways around it and you've got to optimise the strategies that are good for you.

# Karine 10:18

Now, there was some research that was done by Robert Brinkhoff that demonstrated that if a company, if 90% of a company's efforts are in the delivery, 70% is just in delivery, 70% of people will fail.

### Karine 10:32

But if 50% of the effort is in the delivery and 50% then is in follow-up activities, 85% will sustain new behaviours. So what do you do if your company has put you on the training course, but don't do that other bit of work.

### Karine 10:47

You've got to find ways around that for applying it to your, if it's appropriate, but find a way of using and applying it.

Because if you don't start developing the mental models and making those connections, you're not going to improve that repertoire of your skills.

## Karine 11:00

It was just a nice course to go on. And there's so much money wasted in nice courses. So the employer I think has the responsibility to think about what their company needs, the training courses, and obviously for themselves, if they want to be a marketable company, how they're going to get the best benefit out of their employers.

# Karine 11:17

But employees, if you want to enhance your career, then you've got to think about what it is that you're going to do and the skills that you need to develop and how you're going to develop it and the wider repertoire of skills.

### Karine 11:30

Because no company can cover the wider repertoire of skills. You know, very few companies hold difficult conversations, how to, you know, hold a professional conversation when you're met with a difficulty.

# Karine 11:42

So go out and find those things because that's what's going to make you more employable. And at the end of the day, you are an individual person who's unlikely to be with that organisation for years and years and years, even if you are, make



your life better and do it.

### Karine 11:58

But it's going to help you all round because these skills are transferable in other areas of your life and you want to enjoy your life. So it's really important that you have the responsibility. You cannot be a passive consumer of training.

#### Karine 12:10

However good your company is or however bad your company is, you have to be responsible for yourself. So I think the answer to your question is, is we have more of the responsibility than any company we work for.

#### Karine 12:20

Sorry, that was a very long way of saying it, wasn't it?

#### Ross D 12:23

No, totally. I completely agree. So besides that taking accountability, in some cases people might not take accountability or responsibility for their own learning. What are some of the things that get in the way or make it hard for people to learn new skills or develop new behaviours?

### Karine 12:39

Well, there's a myriad of issues that get in the way because we're complex beings, us humans, and a combination of different factors affect different people. So let me think of a few that will spring to mind easily.

### Karine 12:52

So first of all, it's our mindset. Many of us believe that our intellectual abilities are hardwired from birth and it's a predictor of our future. You know, if we start life, it's true that some of us start life with the gift of our genes.

### Karine 13:07

However, the presence or the absence of our natural abilities doesn't really guarantee our success because we become capable through this learning of a development of mental models that enable us to reason, to solve, to create.

# Karine 13:26

In other words, the elements that shape our intellectual abilities actually lie within our own hands. And it depends on the efforts that you put in and whether you're going to find the smallest way to learn possible.

## Karine 13:39

Now, there's many naturally gifted people who fail because they don't put any effort. And there's furthermore, there's plenty of people who don't have this natural gift, but they succeed because they're willing, they've got dogged determination, and they find ways to make that learning more effective.

### Karine 13:55

And there's loads of examples, you know, in the popular media of people that have done that, that have talked about that. Now, a psychologist called Carol Dweck from Stanford University, she demonstrated that much of what you believe about yourself comes out in how much you succeed.

### Karine 14:11

So, you know, your thoughts about your personality and your ability either propels you or actually can prevent you from getting better, from being determined to get around the obstacles like the student I told you.

# Karine 14:25

So if you believe that your qualities, if you've got a fixed mindset, you believe that your qualities are unchangeable, then you're going to look for evidence of that all the time rather than learning for your mistakes.

### Karine 14:36

Whereas if you've got a growth mindset, as Carol Dweck calls it, failure is painful. Don't think you're not going to fail because you've got a growth mindset and you think you can. You're going to fail at some time, but it doesn't define you.

# Karine 14:47

When you're faced with failure, you see it as something you've got to deal with, you've got to learn from. It's not that you can't learn or do something. It just means, it's a lovely little word that she uses that I've used all my life, it just means you



haven't learned it yet.

### Karine 15:02

So if we change the way we think about the exams or the grades or the mistakes or the missed opportunities to improve and we see the grades not as the final result, we provide ourselves with the confidence to continue learning, so yet becomes a pathway to the future.

### Karine 15:20

So your mindset is your number one thing that prevents you from learning. So we talked about, we've already mentioned that the fact that we become passive consumers. Now fear, fear is a really big factor for us, or fear was a really big factor for me in my career.

### Ross D 15:35

Could I just, sorry to interrupt you, could I just pause you on growth mindset for a second? So we talked about the importance of individuals taking responsibility, but how much is a manager responsible, at least within the workplace, for creating the conditions for their team to have a growth mindset?

### Ross D 15:54

So in the way that they respond to failure, for example, conscious that a lot of the people listening to this will be managers. So it'd be good to get your thoughts on that.

#### Karine 16:05

Okay, so to every single manager out, this is your responsibility. And I'm going to say this hugely, because for managers and leaders, you, you deliver the conditions, the climate for which people can learn.

### Karine 16:19

And if failure is the cutting edge of our learning, how can anybody learn if we expect it in one and done? And we do that too often. One and done is our motto in this country. We're quick, quick, quick, quick.

# Karine 16:31

How can you learn from your mistakes? If you don't create a team and need those where people try and fail and learn from that to progress, the best companies are those that want their people to try new things and fail.

### Karine 16:46

If you're forever frightened of failure, you're never going to have real growths in a company. So every manager out there, your job is to provide the conditions and the trust for people to feel they can fail and can discuss when they get things wrong and how to move forward.

### Karine 17:03

And I'm absolute passionate with Libra in that. I also think like, um.

# Ross G 17:07

You know because I'm a manager and you know when people start on my team ask yourself Like is is it reasonable to expect this person to smash it out to the park from day one? Well, I think we would all say no, obviously obviously not so that how am I going to respond?

# Ross G 17:23

So I could like Molly coddle them and after they could expo and feed them That's a very very slow approach to seeing the extent to which people can improve and much better to Give them some support Send them with a challenge and growth opportunity is what you kind of see in like the sort of management speak But you know what we mean was it was it you know?

### Ross G 17:41

Here's a thing to go and try see how they get on and then at the end of it don't go that was Terrible you are you are terrible at that tasks. You were just skipping. It's much better to talk about And what did you find challenging there?

# Ross G 17:55

What were the things that made it more difficult and then how could I help you get better as it because it's in my interest As



a manager not to have to do everything myself It's much better for me that everyone in the team is constantly improving and I'm creating the conditions for them to do that now I mean Ross reports to me so he might have a completely contrary take on my management style, but That's certainly my intention whether that comes across or not

#### Karine 18:16

And I think it's important when you're building trust to get people to collaborate. We don't do enough collaboration so that we use people's strengths. And that's, you know, one of the, the biggest inhibitors to learning is fear, which I'll come back to, but we have to build this culture of trust and we have to build this culture of collaboration because within people, there's a whole set of a skillset that we never ask about.

# Karine 18:37

And when people share their skillset and they're not frightened to say, I don't understand this or I don't get it and, and question and question and, and the way people, you know, it's like, it's that hidden, um, the hidden responses, you know, there's somebody looking up in the air when you don't understand them, it's all of those little things that can stop people wanting to learn or to, to, to grow.

#### Karine 19:00

So we've got to be mindful of that whole culture and that whole trust thing. That's a whole nother podcast.

#### Ross G 19:06

Well, do you want to go back to the fear point? Because I think that fear is something that exists in the workplace far more than we would like, I think.

### Karine 19:13

Oh, it does because it scares people. Most of us are so busy trying to prove our competence that we focus on the tasks that we're good in, we want to fit in, you know, we want to show the strengths that we have, don't we?

### Karine 19:25

And it takes courage to focus on something that you're not good at and to grow rather than to show what you're good at all the time. Um, and when we're challenged out of our comfort zone, what happens is we build up that fight and flight response, which is a psychological reaction that occurs when we think we're going to be, you know, so it's going to harm us or, you know, attack, it's like, oh, most survival mode.

# Karine 19:48

Now, if you think back in cavemen days, it was designed to keep us alive. So we weren't eaten by the saber-toothed tiger, wasn't it? Um, so we avoided doing anything that was massive risk and we avoided, you know, upsetting the tribe because we wanted to stay in it.

### Karine 20:01

Now today's world, the threats that are still there, but they're different. People are more worried about will I fail or, you know, will I succeed? Will I look clever or will I not look, will I be accepted?

### Karine 20:10

Or will I be rejected for the life? You're like a winner or a loser. And in these cases, the survival instinct works against us because we do several things, we hide our deficiencies instead of trying to overcome them.

### Karine 20:25

We then look for people within the organisation or with friends who keep up our self-esteem by telling us that we're good at the things that we're good at, rather than other people challenging us or asking us questions.

# Karine 20:38

Um, you, you keep postponing a task, you become too self-critical of yourself and you find an excuse not to do things. Now we've probably all done that. I can think of a time when I was invited to, to a university to ask, to talk about some, um, form of learning and a gentleman there used to take a term that I hadn't heard of and I, and I said, Oh, I'm sorry.

# Karine 21:03

I don't know what that means. And everybody in the room went. Oh, like I was the world person in the world. How could I possibly have a job in education? If I didn't know what that word meant. It's those little things that prevent us from then



speaking up.

Karine 21:16

But I bet you weren't the only one there.

Ross G 21:18

I bet there were other people in that room that were thinking, oh I'm so glad that she asked that because I have no idea and I'm embarrassed by that.

Karine 21:25

And there's some, there's some statistic, I can't remember it, that says if one person doesn't know, so many percentage of people don't know, but it's the person who asks who then it just chips away at your confidence and makes you feel, you know, that you can't ask, oh, I'm not clever or, oh, that was just dreadful.

Karine 21:42

I like it when you ask them, they don't know. Yeah. So, but that's one of the things that gets in the way. The other biggie, and it, and again, it's something that I've had to overcome myself and I wonder how many of our listeners do, is our time management.

Karine 21:57

We get in the way of ourselves by not managing our distractions, you know. For example, I can think of times when I've got to do some new learning and I've set myself some tasks where I'm going to spend so many hours on this.

Karine 22:10

And what happens is I get to sit down, but I've been dreading it really. So I'll just, I'll just check my emails. Yeah, I just check those. Oh, look, there's a WhatsApp. I'll just answer that. Or I'll just write my shopping list, oh, the flower bar's news emptying.

Karine 22:22

So I'll do all these things and I might have a list of, you know, right birthday card or whatever, and I tick them off my list. And then the time has passed for when I was actually going to focus on that learning.

Karine 22:32

It's gone. Because what's happened is I've got the gratification by ticking things off my list. You know, I've got some self-gratification, but actually I've achieved nothing. I've achieved nothing that I meant to set out.

Karine 22:44

So time management is a big one for many people. You know, how do you go about managing your time?

Ross G 22:50

But that's like an organisational issue as well, because often the way that the training is provided to organisations is it comes at ad hoc periods, and then you don't have an opportunity to apply it.

Ross G 23:03

So for example, I went on a Scrum project management course about six weeks ago, something like that. I do have a project that could use the Scrum methodology. And I haven't got around to it yet. And if I'm honest, that's my fault, because I haven't prioritised it over other things, because it reminds me of the chap that you mentioned earlier, who would go on a training course and then find opportunities to practice it straight away.

Ross G 23:28

And if you don't do that, the further you get from the course that you went on, the less likely you are to do it, the less that you remember, you're not going to get the value of it. So it's not necessarily even just the things that you were describing could sound like time-wasting activities, like some washing the plants or feeling the washing on or something like that.

Ross G 23:45

But even at work, like I've just chosen to prioritise other things to my detriment. They were worthwhile things. They were like work-related things, but they were, I haven't created the space for me to use that particular thing that I learned.



And so I think we do have a, we can make time management seem like it's a wasting time, but actually it's more of a prioritisation thing. Yeah.

Karine 24:10

It is, it is the project.

Ross D 24:12

I think to an extent that that's also, I mean, not to give you a pass for not taking responsibility.

Ross G 24:19

Absolve me Ross, absolve me, yeah.

Ross D 24:21

So, you know, it was obvious about responsibility, but I think to an extent it's also determined by how the tone is set at the top for what learning means and how important it is. So another example is I've been assigned a course on environmental awareness that I need to complete, LND has prompted me to start this course.

Ross D 24:38

It's a topic I'm interested in, I think it would actually be quite interesting, but it is less seemingly urgent and important to me because it's not what I'm measured on. So the worst thing that can happen really is that LND will send a reminder to Ross and Ross will give me a nudge on teams to go and, you know, get it done.

Ross D 24:54

And it is something I would like, you know, probably would be beneficial, but it's just it doesn't strike me as the most urgent thing to do. So I think part of that is like how it's positioned within the organisation as a priority and that sort of thing as well.

Karine 25:07

I think you're dead right, because also don't forget, we're always talking about wellbeing and work-life balance. And so how do you fit all of those, all of those things in? But again, that's down to the organisation too.

Karine 25:17

What is important to the organisation? What training are we going to give? And how are we going to have that reported back to us? You know, because although you get targets in many organisations, you know, do we ever ask, so tell us what you've done for the organisation rather than these are your three targets, did you meet them?

Karine 25:33

What is it you've done that's moved our organisation forward for the people within it, because there's all sorts of things that people do and what do you enjoy doing and why and how much time did we give you towards that?

Karine 25:44

Because often if we turn it on its head and ask people what they've done for the organisation, we get a very different answer from happy meet your target. So there's some interesting work there as well.

Ross G 25:57

So maybe we could finish up by talking about some helpful techniques that will help people learn at work. What should we be thinking about?

Karine 26:04

Okay, I want to talk about quick fix strategies because we, you know, we do too many quick fix strategies, don't we, that are bad for our health, a bit like fast food, which doesn't help us. What we have is a set of strategies that often are very unhelpful to us with learning.

Karine 26:19

So what helps us learn and what helps us commit things to memory so it becomes second nature, like driving a car, you know, you get in a car, you don't think about mirror signal maneuver, you just know how to do it.

Karine 26:30

That's because you've committed it to memory. Rather than some of the strategies that we learned when we first went to school, many of us, you know, crammed for, how many of you have crammed for an exam and then you can't remember



anything because we haven't mastered it, we've just remembered it for the next day.

Karine 26:49

So there's three strategies I want to talk about. One, the first one is spacing out our learning because every day our brains are taking in stimulus from around us, what we hear, what we see, what we smell, but much of it isn't retained because we outsource our memory all the time to our phones, don't we, to look up things.

Karine 27:08

So just because you encounter something doesn't mean you've actually understood it. So let me, you know, or that we've committed it to memory. So let me just give you a little example. The people that listen to this, if you just close your eyes for a minute, now every one of you, don't cheat, every one of you have seen this logo, you've seen the Apple logo, it's one of the most famous, but if I was asked to draw it on the paper, could you draw it accurately?

Karine 27:35

So which way does the stalk go? Is it to the left or is it to the right?

Ross G 27:40

Where's the bite in the end? I think the bite's on the right, I think the stock goes to the left.

Karine 27:45

Okay and what does the base of the apple look like? Is it flat? Is it convex? Is it concave?

Ross G 27:52

Concave I think uh no.. it curves upwards. I'm not sure which one that is.

Karine 28:01

And how many times have you seen that particular logo, Ross?

Ross G 28:05

So, yeah, I own an iPad, a Mac, the Apple Watch. It's absolutely surrounded by it all day, every day.

Karine 28:13

So now look at it now which way does the stalk go? To the right. Now we've seen

Ross G 28:23

I was wrong about the stalk.

Karine 28:25

Yeah, but we've seen it every day. So we haven't committed and that's what cramming does for us. We know it for the next day. How many of you have sat an exam and can't remember a thing about what sort of exams that you've, you've learned years and years.

Ross G 28:37

Well, you have that feeling, don't you, when you step out of the exam afterwards and you forget absolutely everything. I don't need that anymore.

Karine 28:42

Yeah, it's exactly that. And the reason for that...

Karine 28:50

We look at quick fix strategies. It's a bit like fast food. We know it's not good for our health, but we do that. So if we want to commit into a long-term memory and connect the disparate components that come to us, it takes time to mentally rehearse and build those connections.

Karine 29:05

Therefore, we need to space out the practice rather than cram it in one go. This is because it requires us to retrieve our learning after we've forgotten it. The idea behind this shows that the act of recall after a little time has relapsed strengthens the memory.



### Karine 29:27

Now the thinking behind this started with some research from Irving Heminghouse in the 19th century who tried to prove that 75% of new information is lost within about six days. Now it makes intuitive sense.

### Karine 29:42

If I learn a list, I'll forget it. But let me tell you, first of all, his research wasn't based on empirical studies. We need to remember that. You can find advice on the click of a button, but not everything is research.

### Karine 29:53

Not all things that claim to be research have good design or criteria or meet the standards. However, him starting to think about it was the foundation of other people looking into this area. The British psychologist Fred Bartlett rejected all of what he did because his forgetting curve was based on Monson's words and it was based on himself, one and himself.

### Karine 30:17

Nevertheless, Bartlett argued that when we remember something, that we've learned, we have to draw on our memories that have been stored over time so that future learning depends on past learning. We also need a cue.

#### Karine 30:32

What we need to do is we need to space our learning out to strengthen our memory with forgetting slightly and then having to recall it. But then we need retrieval practice and that's through testing.

### Karine 30:46

It makes the word testing even to me and it's an emotive word. From a very young age, we're all tested as a way of measuring our individual abilities and that gives us a false sense of ourselves as learners, which is horrible.

### Karine 31:03

However, if we stop seeing tests as a quick measure of our ability but we practice using it for retrieving our learning, and if there's any gut people from the government listening to this, I want you to hear this, it will strengthen our memory.

# Karine 31:17

We'll be quids in whereas cramming, highlighting, rereading doesn't do it. You'll calibrate your learning through identifying your weaknesses. This is really, really important that we do this retrieval practice.

### Karine 31:31

Now, you don't have to wait till you have a test to do it. You can use strategies like the Leitner system. If you haven't seen the Leitner system, have a look at it. It's a method of using flashcards for remembering.

# Karine 31:44

You just need to have some boxes. You set a flashcard with boxes with questions when you're trying to learn some foundational knowledge. You label the boxes with the number of days you want to learn.

### Karine 31:57

The lowest numbers are going to be reviewed more frequently because another thing that we do when we're learning is we tend to over-learn the things that we're good at, that we know, which gives us an illusion of knowing and makes us feel better about it if we do study anything rather than the bits that we're not good at.

### Karine 32:12

Label each of the boxes and the lowest number you're going to do more frequently because that's the bit you don't get right. On Monday, you look at the question card, you read it out loud and then you turn it over.

# Karine 32:25

If you get it right, it goes into box two. If not, it stays in box one. On Tuesday, you're going to do the same again. You're going to go through box one and then you look at box two and if box two gets it right, you put it into box three.

# Karine 32:37

If you don't get it right, it goes back to box one. On Wednesday, we're only going to review box one because that's the ones we keep getting wrong. Thursday, we do box one and two. Friday, you do all three boxes.



You keep doing. You've got more days of practicing the stuff you don't know. If you say those cards out loud to yourself, it's another way of enhancing and strengthening your memory. That's just one way of doing it.

### Karine 33:01

We've spaced our learning out, which is really important and we've tested ourself to retrieve it back. It's really helpful when you've got tests or trying to learn something new. You can do that at any age.

### Karine 33:12

I've done it when I'm trying to learn French words, all sorts of things.

### Ross G 33:14

I did it with my wife recently, she was studying to be a yoga teacher and so we used that method for her to learn the Sanskrit names of various poses which was something she was going to get examined on.

### Ross G 33:27

You're going to hate what I'm about to say next, Karine, but we are very quickly running out of time. Do you want to make... I know that you said you weren't keen on quick fixes but can you hit the other two points within the next two minutes?

### Ross G 33:40

And then we'll put links in the show notes for anything else we're looking for. So I think you're going to mention reflection and also repetition in time.

### Karine 33:51

Eh, have I got time to do that?

### Ross G 33:52

I'll give you two minutes.

### Karine 33:53

Okay so interleaving I want to talk about quickly first interleaving if you mix things up there's neuroimaging that shows that we tend to learn in chunks. I'm like mass practice so we do sport you learn a sequence of one skill followed by another skill for another skill.

# Karine 34:08

Neuroimaging shows that when we do it that way we're actually not created flexibility in our brain that more complex learning would do when we very are learning. So I've been into places if I think back to school even very young children where they do master's of maths rather than doing it all on one subject they're asked to recall different areas of maths.

# Karine 34:29

The neuroimaging shows that we use a more we feel more able to flexibly apply that learning and if you think about our daily lives things that come to us in nice compartments it comes to us in varied.

### Karine 34:43

Amounts and different stimuli and different things come at us and we have to learn to recall our previous learning make connections to find new solutions so it's really important to very your practice and not always learning chunks when the going gets harder.

### Karine 34:59

It feels is counterintuitive to the way that cramming you know rereading and highlighting is because it's it feels less productive but it's actually more durable the research has shown it's more durable and you're likely to master things more so that's really really important to to vary your approach and then right a reflection allows us to strengthen the learning because if we rigorously question ourselves by asking ourselves how are one where.

# Karine 35:28

We become unplanned impulsive action turns into self awareness in essence we learn from our own mistakes and we can then reflect on those experience and make the connections between what went well what didn't go well and identify patterns of relationships to apply learning.



That was excellent, thank you very much, it's starting to put you under that pressure. So we're going to wrap up our discussion on learning new skills and behaviours at work by asking Ross what your main takeaways are from this conversation.

Ross D 36:01

main takeaway is around the responsibility of managers to create a growth mindset culture within their team. So think about the way that you respond when things go wrong, the types of discussions you have with your team members, how you discuss their development and what you're doing to support it.

Ross D 36:19

I think that can go a long way.

Ross G 36:23

I was going to say the same thing, but I do actually have another one, which is, I quickly jotted down the three points that Karine talked about there. So one was spaced practice, one was interweaving, so you don't do the same thing and again and again and again, you constantly have a new stimulus.

Ross G 36:40

And the third was reflection. And I think what wraps all of those things together is they are more difficult than your default position might be. So if it feels like learning is super easy, then you might want to ask yourself whether you're actually learning anything or whether you're just doing the easy thing because you feel like a buzz and feel like that's really proactive.

Ross G 36:58

But actually the hard thing is the way that you can learn something. And Karine, what one idea, if you could only share one, would you like listeners to take from this conversation?

Karine 37:07

Ooh, one idea, one idea. Regardless of past achievements and your present level of expertise, your future depends on your ability to keep learning.

Ross G 37:17

Very nice. I like it. And now let's move on to our regular feature, One Thing I've Learned This Week, where we share something that we've picked up over the past seven days. Ross, do you want to go first?

Ross D 37:33

Yes, so I've recently been spending some time with my wife's family and a few of them are, well, have become amateur birdwatchers. And they recommended an app called Maryland, which is developed by the Cornell Lab of Ornithology.

Ross D 37:52

And the app has a few different features. So it has a sort of wizard where you can, for example, provide your location, time of year, and a description of a bird, and it will present you with the most likely bird you're seeing.

Ross D 38:06

So if you're wondering, oh, what's that bird? You can quickly find out what it is. It also has a sound recording feature, so you can record bird song, and it will then match that song to other recordings that it's received.

Ross D 38:16

And over time, it becomes more intelligent or more accurate, because it's keeping that record of your recording what you think most closely matches it to others. And then improving over time. So quite a cool little app.

Ross D 38:33

I don't know very much about birds, but I've started trying to use it. It seems pretty accurate from what I can gather, so we can put a link to that in the show notes.

Ross G 38:42

Yeah, that's great. Karine, what have you learned this week?



### Karine 38:45

Oh, you've got me in there. What have I learned this week? Okay, so this is not as interesting as you're at, but different. So I was reading some published statistics, isn't that terrible, from the Department of Education that showed that there are over 80,000 children in care and 60, it's about like, it's like 10 out of every 10,000, there's about 67 children that are taken into care.

### Karine 39:16

And that between the ages of 19 and 21, many of them when they leave care are unemployable and about 33% of them after they leave care are homeless. So I felt really down about that. It was just something, you know how you come across these these things and you think, anyway, I was contacted literally three days ago by a student I haven't seen for, oh, must be 20 years now.

### Karine 39:42

And the last time I saw her was the day she was taken into care with her sister. And my heart went out because I just read this review, but the hope, there's always hope. It was so pleased that she contacted me and I was interested in finding how she did, especially having seen those damn statistics.

#### Karine 40:03

She'd overcome huge obstacles and now works for social services, trying to help the system from in with our own personal insights. But it reminded me of a quote from Bear Grylls, believe it or not. There's always someone that you're going to meet in your life that's going to be smarter than you, better than you.

### Karine 40:20

And I think, I mean, this isn't a direct quote, but it was something like, you know, have a better start in life than you. But the best life chances and the best rewards goes to those people with absolute doggy determination who pick themselves up, dust themselves down, whatever life throws at them, sometimes quietly and even undramatically.

### Karine 40:40

And she's one of those poor people. So for me, that was real hope after, you know, because there's so much on the news, sometimes I don't watch the news because it just makes you feel down. And then you meet somebody as amazing as this and think, wow, there's always hope in the world.

### Ross G 40:55

Yeah, that's really nice. Mine's less inspiring, but well, maybe I'm speaking out of turn, maybe you will be inspired by this. I've been learning golf. I had always thought of myself as someone who can't golf.

### Ross G 41:11

So the language of Carl Dweck, I had a fixed mindset because when I was like 12 or 13, my dad would take me out golfing. It was not a pleasant experience and no one got on terribly well with one another.

### Ross G 41:20

And so I stopped golfing for years and years stuck to later on in this year. And so I thought, well, I better get some lessons then. Because having played no golf in my life, more or less, I'm not going to play three 18 hole matches games.

# Ross G 41:39

I don't even know what the words are for this over the course of a single weekend. And so I've had two lessons so far and you know, that was incredibly difficult and quite painful. But I went to the driving range last night and it's got a little computer thing and it shows I had a zero percent consistency with my shots.

# Ross G 41:56

But two of them went straight and they were the two that when I was thinking about the very small things that my instructor had said to me, that it actually worked. And so maybe a little, it touches nicely on growth mindset, also spaced practice, also reflecting of what the instructor had said.

# Ross G 42:16

And my grander kept telling me to stop using the same club and to switch. My grander took me. He would switch between the driver and the iron, I want to say, so as to not get into a pattern with it. So then there's the interweaving as well.



Ross G 42:29

So I thought I'd mention that because it nicely brings together everything we've talked about so far. Now, Karine, where can people find out more about you if they wish to do so?

Karine 42:38

Okay, so I'm on LinkedIn because my career, interestingly, when I left head chip and left education after four decades has continued. I managed five weeks of retiring and has continued in a whole variety of ways.

Karine 42:54

Um, so you'll also find me at Educate Ventures, where I've been working with Professor Rose Luckin looking at artificial intelligence, and we've just published a book on that, um, called artificial intelligence for teachers.

Karine 43:06

So you'll find me, you know, either on my LinkedIn with some of the other work that I'm doing or, or at Educate Ventures.

Ross G 43:13

Brilliant. We'll put links to all of that in the show notes. Thank you so much, Karine, for today. That was a really fascinating chat. I think I speak for me and Ross when I say that. Absolutely. For you at home, you've been listening to the Future Talent Learning Podcast with me, Ross Garner, and with Ross Dickey.

Ross G 43:30

Our guest this week was Karine George. Until next time, bye for now.