Ackworth School's 'Parent Ped Pod'

Our staff share pedagogy theory and practice with parents.

Teachers supporting parents, supporting your child's learning.

Episode 1: Helping your child learn: metacognition

Elizabeth Bowey

Thank you for joining us to think about how your child learns and the ways that you can help them to learn on their journey through their time at Ackworth.

So at Ackworth, we have the privilege of having children here from nursery all the way through to 18.

And so I am Elizabeth Bowey and I am the Deputy Head in charge of curriculum for that whole journey.

And with me is...

Amanda McShane

Amanda McShane and I'm the head of Coram House, which is the junior department to Ackworth School.

Elizabeth Bowey

So we both have rich educational backgrounds working in both the state and the independent sector.

Amanda McShane

And we're excited to bring our knowledge and experience together to help the children at Ackworth to learn.

Elizabeth Bowey

So we wanted to start with a concept called metacognition. And this comes really research-informed about how your child learns.

There's an organization called the Education Endowment foundation, and they look at research that is conducted within education and work out what are the most effective methods for schools and for teachers to make the most impact on how young people learn and to see progress.

Metacognition consistently comes out as one of the most effective and cost-effective ways to impact your child's learning.

So they will look at a metaanalysis of hundreds or thousands of studies and metacognition is shown to have significant impact on the way that your child will make progress.

So, Amanda, do you want to explain a little bit about what metacognition is?

Amanda McShane

Absolutely. And I think metacognition is so exciting in that it's so simple.

Metacognition is really about thinking about thinking, and it's about how we teach children to think. Historically, children have been receivers of education. It's been really easy just to tell them how to do things.

But metacognition turns that on its head and it encourages children to actually think about what they're doing. So teachers become more coaches. Parents, we're asking you to become coaching partners in your child's education. And by doing this, it helps children to take a greater control of their learning. It helps them to be much more proactive in their learning because they start to learn about 'where can I find that information to help myself to move forward?' And so, suddenly, we're empowering their learning and their education.

We have a way in class of encouraging children to think before asking. There are a couple of ways of thinking about this which, Elizabeth, you've probably come across. I've always called it 'three before me', which is where can the children look before they ask me, the teacher? And I think you've referred to it as 'the four Bs'?

Elizabeth Bowey

Yeah: book, brain, buddy, boss. So look at their...use their brain, look in their books, talk to someone next to them and then, finally, come to the teacher...before they do that, so that they've learnt where they can find that information.

Amanda McShane

That's right. It just gives them a really good strategy for their own learning.

And I always think that, when the children come to me and go, 'Oh, my brain hurts!', inwardly I'm going, yes, good! I want your brain to hurt because I want to know that you're using your brain.

I think children these days so want to get it right. They don't like making mistakes and they're scared of that 'I can't do it' moment. But that 'I can't do it' moment is really important, isn't it, on that learning journey?

Elizabeth Bowey

I've been talking to our senior school about AI and the benefits and the risks of AI. And one of those risks is the overreliance on AI. And that creates a kind of laziness, an intellectual laziness.

And I have literally been talking to the children about the bit about learning that is the most powerful is that sticky bit, that bit you just described. When the teacher delivers some content and you think, 'Oh, I don't understand!'. And then you do some questions, you're like, 'Oh, I don't understand!'. And then you have to do them and do them again and reflect on it. And that's the bit that sticks the information in your brain.

So when we think about metacognition, which might be a word that you are not familiar with at all, we can break it down into a three step process.

So it's about the student planning what they're going to do; while they're doing it, thinking about how's it going - that's the monitor stage; and then after that, evaluating how it went. And by getting our children to recognize these steps in the thinking journey and to explicitly talk about it with them - so us as teachers, but you as parents also being really explicit, they will start to do that much more naturally themselves.

So they'll start to think 'How can I approach this problem?', 'What tools do I have to approach this problem?'. When they're doing it, they can then think, 'Is it going well?', 'What could I change to make it go better?', 'Oh no, that isn't working. What elements of it aren't working?'. And then afterwards to think, 'Oh, I'm really pleased with how that went because...' or 'Next time, if I did it again, I would change this...'.

And we'll go on in a few minutes to talk about some examples of how that is realized. And we, we spoke a lot before about how cooking and other examples are really lovely ones that you can do at home to get them to, to monitor this.

And we always go to Lego, don't we!

Amanda McShane

We do, yes!

Elizabeth Bowey

We always end up with building things with Lego!

Amanda McShane

Making mistakes, and experimenting...and learning's just the same. Children have to experiment with their learning and they have to understand that it's okay to make mistakes. And children are so worried about not making mistakes. They've got their sort of perfectionist attitude, but those mistakes are so important.

One of the phrases that we use in Coram a lot is FAIL. It stands for First Attempt In Learning - that we can try and take that fear away from learning. And FEAR, incidentally,

is of course, Face Everything And Rise so that we can move on, but we have to go through those processes and then we move on.

So taking that worry and anxiety away from failure and from mistake-making, turning that on its head to be, okay, I've made a mistake, what can I learn from it? And that reflective part of metacognition is so important, isn't it?

Elizabeth Bowey

Not getting paralyzed by the process of failing and of learning.

And what we need from you, or what we're suggesting to you as parents is the engagement that you can have with your children is to vocalise this with them.

So if I go to the idea of baking a cake, it's to say to them, okay, well, you want to bake a cake or we want to bake a cake, what do we need to do? What's the first step? Getting them to own that they need to find the recipe.

What's going to make a good recipe? Well, knowing what the ingredients are and seeing if we have those.

Okay, what do we do if we don't have the ingredients? Are we going to go to the shops or are we going to look for alternative ingredients?

Where would we find out if we have alternative ingredients? And it's about talking them through this thinking process. Then, as they're doing it - and let's say that they overpour the milk and they've poured too much into the jug - well, what are we going to do? Do we start from scratch or do we take a risk and say, is the cake still going to work? Do we see what happens? Is there anything to lose if we see what happens? And getting them to recognize that they own all of these tiny decisions along the way and that they can take control of that process and that they can evaluate the next step...

And it seems quite basic, I suppose, but that is the point of metacognition, this is why it's so effective, is because by doing these small, tiny steps all the time and modeling this language to your child, you show them how important all of those thinking building blocks are and you give them autonomy as well.

There's this lovely thing about intrinsic motivation. Intrinsic motivation is autonomy, connectedness and competence.

So if you give them autonomy, you make them feel connected and you show them that they can be competent, give them the skills that mean that they can be successful, whether that means it succeeds or it fails, you will give them that intrinsic motivation to succeed.

So by saying to them, 'Well, which recipe are we going to use? What are the risks of using that recipe? Or what do we do if we...' - you empower them to have that autonomy in their learning to make those decisions.

Amanda McShane

I think there's one other thing that you've mentioned there that I think is really important that we touch on, is you talked about the discursive process of it.

And I think encouraging children to talk out loud, to talk their thinking out loud, it slows their thinking down a little bit and it helps them to process more effectively. So that talking out loud and talking through that reasoning and asking the children 'What do you think?' helps their reasoning so much more than just them having it as a muddle in their head. It forces them to make a little bit more sense. It's untangling the string, really, isn't it? So that they can then think in a more linear process.

Elizabeth Bowey

And one thing that I'm going to confess here that all teachers have to work on is our wait time. And there's really good research into this that shows that on average, a teacher will wait less than a second after asking a question before taking an answer.

But if you think about your own brain and about your own thinking process, a second is never long enough! And that's the same for our young people, but that's the same for you as parents at home...is that in our time-pressured lives, and, you know, both of us are parents and we understand that, that we are rushing from one thing to the next, the next, and cramming all of the activities in...and taking that time and setting aside that time for your child to not answer immediately...and demonstrating to them that thinking time is so important to the process, is also something that we would ask you to think about.

Amanda McShane

It's asking the question...a pause before the pounce, really. And it's that pause that's so powerful.

Elizabeth Bowey

Yeah. Recognising that they may need time to contextualise a thing that you've asked them, or to build up the confidence to say 'I don't know'. And when they say 'I don't know', you can then push them in a metacognitive way to say 'Well, where could we find out how?'.

That's the metacognitive bit. It's the not-just-stopping, but empowering them to find the next answer: 'Okay, so you don't know, but could we look on the Internet?', 'Could we look in a book?', 'Could we look in the fridge?'. Whichever the question is, to find that

next bit, but empowering them that they own that, they own that journey of finding information and making those choices.

Amanda McShane

We're just sort of finding the hinge really, aren't we, to open the door for them to step through to their next bit of learning? And that's, you know, as a teacher, that's so exciting. And I think, as parents, we hope that you'll find that exciting as well, so that you're opening the door to their learning and to the vast possibilities of their thinking, and to move children away from a very narrow view of what they've got to do.

And it's opening their brain to the possibilities that there are multiple ways of finding out, multiple ways of doing something so that they can become more proactive learners, really.

Elizabeth Bowey

So in summary so far, what we have said is - and please do go away and have a Google of what metacognition is, please do - but metacognition is about the way of asking questions to prompt your child to think about the solutions that they can find themselves. So getting them in that triangle of plan, monitor, evaluate, plan, monitor, evaluate.

And what we wanted to do now is talk to you more specifically about the different phases that your child could be at.

So we are an all-through school. So Amanda's now going to talk a little bit more with a bit more nuance about what to do if your child is in Coram.

Amanda McShane

So when you're asking questions, and we ask lots of questions, we've just mentioned having questions and then the pause, remember that children need to process all of the information. When you've been formulating the question, you've been thinking about it for a little while, but it's the first time that your child is hearing it, so they've got to process all of that information. So please try and keep questions small and keep them specific.

The questions can become bigger and more multifaceted as the children get older, but the younger children are, you need to keep one point per question and then increase it when you feel that they're ready to process and accept more than one point.

So keep questions small and specific and, as we've mentioned, give the children time to process what that answer is.

And things like, at the end of the day, when you're asking something like 'How was your day?', that's a really big question for a small child because the day's been so busy,

they've had their friends to contend with, and play with, and fall out with, and make up with; they've had lots of learning to do; they've had lots of little problems that they've had to solve.

So a question like 'How was your day?' is huge. So ask them something like 'What did you enjoy eating at lunchtime?' or 'Who were you kind to today?' or 'Who was kind to you?' or 'What did you learn about in maths that you didn't know before?', for example. There are endless questions. And so, moving on from that, to remember to praise and to pinpoint that praise. If you just say, 'Oh, good boy' or 'Good girl', but they're then thinking 'Well, what have I done that's good?'.

And so we must always catch children being good, but we need to identify what it was that they did that was good, so that then they can replicate it. So 'Well done. I really like the way that you used your letter sounds to write those words.'. They'll remember that and they'll do it again. But if you just said 'Well done on your literacy', what does that mean? So pinpoint that praise.

Elizabeth Bowey

With my son, I will say to him 'Where did that thinking come from?'. And I deliberately use the word thinking a lot in my communications with him: 'Where did that thinking come from?'. When he comes out with something that's wonderful, see if he can identify where in his day he learned that from, or how he is joining those ideas together to then tell me a new piece of information.

So, I also then, if he's come up with a good idea or something, will say 'That's really great thinking. Well done. Well done for putting those things together. That was quite complicated.'. So that pinpoint is also recognizing to him that that's what his brain is doing in that moment. He's joining these things that have come from another lesson on another day. He's bringing that forward.

Amanda McShane

I really like that you mentioned praising the thinking and praising that process rather than the end result, because metacognition, as we said already, is all about that process. So again, remember to praise the process, not just the finished product.

Elizabeth Bowey

Yeah. So in my cake example, when we've got too much milk, you might be praising the bravery of taking the risk of putting too much milk in! 'Let's see if the cake turns out all right!'.

So I think as well, it's about making sure that you introduce this idea with your children of planning and reviewing. So I've spoken about the cake, but a lovely example that you

spoke about, Amanda, before, when we've chatted, is about planning a day out with your children and getting them to take control over something.

So 'What are we doing on Sunday? Okay, well, I'd like you to think about that and I'd like you to think about, well, how are we going to get there and what's the weather going to be and what do we need to wear and should we take snacks and if so, what snacks?'

And there's this whole series of responsibilities that they could then start to take that can empower you as a family, but also really empower them.

Amanda McShane

But it does take time and it does take a degree of trust. So it's making sure that you give yourselves as a family and also to give your child time to go through that thinking process and the planning process, and then they've got ownership and it becomes a very exciting day and it becomes a really valid and huge learning experience.

And we can talk about these sorts of things in guerrilla learning at another point.

But yes, really important to give children the ownership of their own learning.

Elizabeth Bowey

And I think another thing to think about is how often do you model your own thinking out loud? How often do you say out loud 'Oh, I'm not sure which choice to make. I'm gonna make this one because...'.

Because that's so powerful. Our children are little sponges of us. And you see that. You will know when you hear your own child repeat something back that you have said and you think 'Oh, my goodness, did I say it like that?'! And then you know that they picked it all up from you.

But that is the same with the power of metacognition. Can you model your own thinking to your child, knowing what a sponge they are? And if they see you owning that, and owning the risks you're going to take, and owning when things don't get wrong, out loud to them, they will realise and be freed from that as well. So they will know that, well, Mum and Dad have to make all these choices and when they do, they think it through and you might show them how you plan to make a decision to show them how adults navigate this as well. It doesn't just stop with school. It's a whole life skill that we all have and need.

And I think as we think about the senior school, all of this is true, all of the things that we have said, but you're now thinking about it on another level in terms of getting them to plan their time, getting them to think about the responsibilities of the qualifications that they're going to sit, whether that's GCSEs, A levels, BTECs, the EPQ. How are they managing their time to make sure that they fulfill their potential? What do they understand about how they learn as well?

So can you start talking to them about 'What are your learning strategies?'. What works for them? Could you incorporate some really safe use of AI together to think about looking for revision strategies, using AI and working out how they learn?

So you're starting a conversation, a dialogue with them about 'How do you learn? What lessons do you enjoy the most? Okay, what's the learning style in those? What helps you retain information most easily? Which tests do you do the best in? What strategies do you use before those?' Getting them to identify those things at home. And we'll be doing that at school as well. But then can you put all of that information into AI and say, give me some really great revision techniques or use that to support you and in a way that helps you to talk about the safety aspects of AI as well?

I think metacognition in the senior school is also about independence and we've spoken about that a lot. Getting them to organize their own trip, getting them to do the baking. And it's about that. It's the next step up. Who are you? Who do you want to be? What things do you like? How do you like learning? All of that so that they understand themselves as they move into young adulthood and then adulthood.

And so forming these questions with them, together, in a non-combative way, is a really important way of helping them to determine that.

And I also think that is something that we really want to caveat. Both being parents, we understand that in a really clinical podcast-style setting, it's easy for us to tell you how to have these conversations with your children.

But parenthood is tough and it comes with challenges and emotions and teenagers and tiredness and conflicting time schedules and all of those things. So do this in a way that suits your family, do this in a way that you guys find fun and collaborative, but bear it in the back of your mind whenever you're having those conversations, how are you eliciting thinking from your children? How are you giving them opportunities to articulate their thinking?

And the kind of final sentiment that we wanted to end on was about don't steal their thinking. Don't take away the opportunities that could be there for them to show you how their brain is working and to get them to recognize how they are thinking about learning.

Amanda McShane

Yes. And I think again, it comes back to that pause, doesn't it? Again, not jumping in and answering the questions for them. It's about making sure that they have that thinking time and that you demand that thinking from them. So asking them their opinion, but don't just accept one word answers.

You know, if you're asking them which do you prefer, chocolate cake or rainbow cake? Always comes back to cake with us, doesn't it! Chocolate cake or rainbow cake? Don't

allow them just to say, well, chocolate cake. Why? Why might somebody prefer rainbow cake? You know, really extend that thinking. So don't, as we say, don't steal the thinking, just draw it out of them, every opportunity.

Elizabeth Bowey

There will be hopefully more podcast episodes coming soon that develop these ideas and think about growth mindset.

We'll think about guerrilla learning and then we'd be really interested to hear on any other topics that you would like us to talk about.

Thank you very much.

Amanda McShane

Great. Thank you very much.