

Interpreting and using other people's theories and facts - 09th March 2022

[MUSIC PLAYING]

ISABELLA HENMAN: Good morning, and welcome to Student Hub Live, our first live broadcast in a little while. My name is Isabella Henman, and some of you may know me because I am normally online, and I'm normally the voice behind the online workshops. But I've been allowed out today, allowed out to play in the studio in Milton Keynes, which is absolutely fantastic to be here. And I hear that there's at least a hundred of you already talking about my favourite subject, chocolate, which is absolutely fantastic. Though apparently I'm not allowed chocolate in the studio. I mean, how rude is that, not allowed chocolate?

So, for those of you who haven't been to one of these sessions before, or those of you who've been to one of the online sessions before, it's a little bit different. So, obviously, you can see that some of us-- and I've got a number of guests with me, and I've got a number of people who will be looking after the chat. So HJ, our wonderful person who's been in chat for quite a long time-- I think he's been with a Student Hub Live longer than I have-- he will be there. And I'm sure you'll say hi and wave to us today, HJ. Fantastic.

We've also got Chenoa and Suzanne, who are also today looking after our chat with us. And you should be able to notice it's them because they will have the SHL logo in front of the chat, and they'll be there to answer your questions for you. I also have to live guests with me, Lucy Anderson and Ellie Dommett, who are also on camera. Wave and say hi. Great, lovely. I'll be coming to them a bit later.

So, just to let you know a little bit about how these work. You can use the chat as much as you like. It's fantastic to hear your ideas. I know you've been talking about chocolate and the weather so far. I'm inside the studio, and so I've got no idea what it's like outside, but there you go. And you can share the information. There will be various questions to think about along the way.

Please don't share any personally identifying information in the chat because we are going out live and this isn't behind any paywall, as it were. But you are very welcome to chat to each other. And if you've got a particular question, often it's quite a good idea to put a capital Q at the start because then people know it's a question. If you can't or aren't able to engage with the chat, you can send emails to us. And the email address is up on the screen at the moment-- studenthub@open.ac.uk. And I've got a team, my wonderful team that are out there, will be looking after those emails and sending them through so we'll be able to hear different things. So, hopefully that gives you a bit of an idea about what we're talking about today.

So, we're talking about interpreting and using different people's theories. So, within your study, often you might have to represent module information. And you'll be able to see the module information. You'll think, great, OK, that's lovely. The person who's written it knows what they're talking about. And it goes up into your brain, it jiggles around a little bit, and what needs to come out is an interpretation that is effective in answering the question.

So, what are we going to be talking about today is I've got my two colleagues with me, Lucy and Ellie, who will be talking about a number of different things to try and help you. So, what I want to do is I'm going to come to Ellie first, and what we're going to be thinking about is, as a student-- Ellie, I know you've been a student, and you've done a number of different degrees and a number of different things. What's the first thing you think about if you're needing to interpret ideas and interpret theories?

ELLIE DOMMETT: Look at a particular theory or apply it to a certain situation is to check you really understand the theory in the first place. It can be really easy to read material and think, well, I could parrot that back. I could say that back, so I must understand it. But the key thing is to identify whether you really understand it. So, go back, look at the original material you read. Of course, that's most likely, in the case of The Open University, going to be your module materials. But it could be other things as well that you are directed to or that you found for yourself.

So, I'd go back and review the theory. And then look at some of the evidence behind that theory because anyone can have a theory. Anyone can have an idea. The strength of a theory is how well-supported it is by evidence.

My main background is within the Sciences. So, I might look at a theory. There's a theory of how a particular circuit works in neural circuits, so a circuit within the nervous system. I might then look for the evidence of that. So, if the theory says, well, there must be a particular type of cell at this location, I'm then going to look at the evidence that that kind of cell has been found.

So, that's the most important thing to do, is to look at the evidence supporting a theory, check you understand why it supports the theory or why it doesn't. So, sometimes drawing up tables can be good for that, where you can have a theory and then a column for evidence for and against. And then the other thing is to look about whether the theory applies in the real world.

So, the other area that I work in is education research. There's some great theories about education and how things should work, so how particular learning approaches should work. But whether they actually do in the classroom is a really different situation. So, being able to see how something works in practise, whether that's in a classroom setting, perhaps if you're talking about medicine or health, it could be in a clinical setting. So, in a hospital or for a patient in their own home.

So, it's looking at how the theory really works, if it works, so the evidence behind it. And then if it works in the context that carries the most meaning, which could be a classroom, it could be a hospital. That sort of thing.

ISABELLA HENMAN: Great. Thanks, Ellie. So, you've mentioned a number of different types of theories there. So, a lot of what you've been saying sounds quite straightforward. You've got a theory, you accept it, you get the evidence. But what about competing theories?

And this is one of the things we wanted to ask you. Everybody that's listening and watching at home, have you ever come across any competing theories within your module? And what do you do about that? So, that's a question that we want you to think about, those of you who are listening at home.

So, Ellie, I'm going to throw it back to you. What do you do if there's competing theories? How do you deal with them? If one person says one thing and one person says something totally different, I mean, what do we do? It's like the idea if somebody says that dark chocolate is great, and somebody comes up with the not remotely accurate theory that white chocolate is best. So, what kind of theories have you come across that are competing, and how would you deal with them?

ELLIE DOMMETT: Yeah, so this happens a lot. And in fact, it should happen. All good academic debate requires exactly that-- a debate. So, between different theories. More often or not, over time, theories evolve to address some of the shortcomings that they might have.

So, one of the things that you do, again, is you go all the way back to the evidence and you look at how the evidence is being interpreted. So, one of the things that you might find, for example, is a study has been done, and the authors-- or your module team, in the case of the OU-- might present some of the data from that. And that appears to support a particular theory. And then a little while later, somebody does a slightly different experiment, and the results of that one change how we could have interpreted the first one.

So, that's one thing to do, it's to look and see if any of the evidence has been discredited or improved upon methods that we use in research, change, and sometimes-- or hopefully-- they're changing for the better. So, you're going to get research that was carried out at one period of time could be improved upon at the next. And that means that the latter, the later research, could be a more valid approach.

But the other thing to do is to look and see what other people in the field, experts in the field, think of competing theories. So, one of the things you can do is you could have a look and see how frequently a paper or an article or a book about a particular theory has been cited by other experts. You have to be careful here because if something's really rubbish, people might cite it to discredit it. So, you have to have a little look about how they're using it.

But that is something you could do. You can have a look and see how well respected it is by experts in the field, as well as do your own evaluation of the evidence. And it is OK-- in many cases and in many fields, it's OK to recognise there are competing theories. Both are equally valid at this point in time because perhaps we haven't been able to do the research that would distinguish one as being better than the other. So, that's OK as well.

There is rarely a need to be very definitive in these things. If there are competing theories, it's OK to acknowledge that and recognise that they may have different strengths and weaknesses. But at this point in time, we might not be able to say Theory A is better. I mean, clearly white chocolate is better. But we might not be able to say that all the time.

ISABELLA HENMAN: No, no, no, no, no. I'm sorry, I have to interrupt you there. White chocolate clearly isn't better, so we're going to have a competing theory. And there's much, much more evidence for dark chocolate being better. I think you will find that I'm right on this front, actually, Ellie. But it's very interesting.

So, you're mentioning that you're saying that there's different pieces of evidence, and you can't necessarily discredit. So there's an interesting idea there. Is it the case that sometimes evidence can be discredited? Is that something students are likely to find in their modules? Have you ever come across that, Ellie?

ELLIE DOMMETT: I think sometimes evidence can be slightly discredited in the sense that perhaps a researcher-- so some of the TMA's emerging market at the moment are about a particular theory of pain. And this particular theory of pain says that we should have certain cells that respond in one way in our spinal cord, and cells that respond in another way. And after decades of research, we haven't been able to find this exact type of cell.

We found something else that's probably capable of doing the job. So, the original theory would need to be adapted to match with the evidence. So, in a sense there, the lack of evidence is allowing us to discredit something.

If a theory has been around for a very long time and there's a lack of evidence for it, that might suggest that it's not appropriate. But also, we do occasionally see situations where research has been done. So, for example, in a case of an illness, so a medical condition, scientists may conduct some research. But then, for whatever reason, a better method comes out, or it becomes apparent that the method that was being used isn't quite doing what we think it is. And, as a consequence of that, in a sense, that evidence is discredited.

So, I think from a student's perspective, the key is to be critical of everything you read. And critical here doesn't mean slate it. It doesn't mean be negative about it. It means unpick it and see what the strengths and weaknesses are. No single piece of research and no single theory is perfect. And that's OK. It's a case of balancing what's good about it with what's bad about it. And some bits of evidence are very weak. So, one thing to think about is, if you only have one study showing support for a particular theory and lots of other studies indicating that perhaps it's not perfect or it's not ideal, then probably the theory isn't that strong. So, it's a key to looking at converging evidence. Never assume one study will give you all the answers.

ISABELLA HENMAN: Thanks, Ellie. And, very interestingly, James Bates's come through on the chat and raised a really interesting point about better. Obviously, he's talking about chocolate, and dark chocolate being better. I trust you are, James, because if you're not, I'm sorry, that's not right.

But this is a good idea in terms of better. You've been talking about different theories. And I like the point that you said that there's some theories where there are very well known theories, but there's not necessarily a lot of evidence for them. So, drawing us back to our modules, sometimes you are presented with information, you're presented with theories, by your module. You may not think that there's a lot of evidence for them, but your module does ask you to put them in.

But what I want to do now is, because we asked you the question, I wanted to come over to HJ and see what other comments have been coming up in the chat. So, has anybody come across competing theories, HJ? What kind of things have you found so far?

HJ: Well, there's a lot of competing theories in the chat, although I wouldn't call it a theory as white chocolate is clearly superior, and Elizabeth agrees with me. We are drawing battle lines as we speak in the chat. But there are a lot of good points which may be relevant to our question of the superiority of different types of chocolate.

So, Susan says, how would you evaluate the reliability of evidence used to support a theory? Spot things like cherry picking results, which I think may be happening here. And Samantha, I think she's talking about something she's picked up from her module material. She says, where would Caramac come into the discussion? Does it support or contrast white chocolate?

Ashanti has got a really good point, and this is a tool that I like to use is well, is using the prompt checklist. If you haven't come across that before, it's a great tool to help you evaluate your information and maybe think about it and get a little bit of structure to what you're looking at. And Ian's got a good point, as well. So, he says, often papers issue corrections after challenges, and there is a risk that the original paper is used to support a theory rather than an amended one. And I think the key to that point is

making sure we're getting the most relevant information to inform the theories that we're using and putting them into practise in our writing.

ISABELLA HENMAN: Great. Thanks, HJ. Yes, that's a really relevant point. I think that links back to what Ellie was talking about, about some articles being cited quite a lot even though they're rubbish. But they're being cited because they're rubbish. It sounds a bit of a weird thing, but that does sometimes happen. I wanted to come back to you, Ellie, just to sum up this idea about knowing whether you've got the information.

So, is there anything-- your last point that you want to add to us for this one about knowing whether you understand the information and balancing these theories?

ELLIE DOMMETT: So, I think one of the checks that I do, and I did this actually all the way through one of the degrees I did with The Open University, actually, is if you understand it, you can always explain it to somebody else. Now, I know what some of you might be thinking. Nobody is interested in me talking to them about the theories I've got to write about for my coursework or for my job. But actually, it isn't really about explaining it to another person.

My dog used to be a very good listener. I suspect, at some point, she fell asleep, but she used to sleep with her eyes open so she looked like she was paying attention. So, the key to knowing if you can understand something is really, could you explain it to somebody else? Could you sell a theory to somebody else?

Or the alternative is, could you explain why a theory is not appropriate if someone believes in it? So, could you persuade somebody with evidence? And making sure that you can give really tangible and specific examples for the evidence. If somebody hasn't measured something in the most appropriate way, can you explain that to somebody else? So, understanding is really all about could you teach this to the dog. That's the take-home, I think.

ISABELLA HENMAN: I'm pretty sure that's going to link quite closely into something Lucy-- we talked about, and we were going to be talking about, in terms of discussing people and explaining to people. Can you explain it to other people? And this is where I'll probably bring in study buddies. So those of you who have been to Student Hub Live sessions before, whether you've watched online or been to the workshops, know that we talk about study buddies. So, a study buddy is anything anyone that can help you with your study.

We often find that we've got four-legged study buddies, but we've had all sorts. I think we've had eight legged. And I think on the screen at the moment you're seeing Marmalade, which is Lucy's study buddy. And that was where Marmalade was trying really hard to pay attention to the module materials and not actually eat them. I think if they'd been scented with carrot, I don't think they would have still been there. I've met Marmalade. I know what she's like. I know she is very, very keen on apples and carrots. So, Lucy, I know that you sometimes explain to Marmalade, whether she wants to know or not. So, how about going about and explaining to people? So, understanding things, and how would you do that.

Linking from what Ellie was saying about explaining your understanding. Do you want to tell us a little bit more about that, please?

LUCY ANDERSON: Yes. I mean, I think that there are really multiple levels of understanding. I remember being back at school and I was really rubbish at maths. I didn't understand maths. I didn't get maths. So, I could watch the teacher go through something on screen or something on the board, and she would merrily explain how to do a particular equation. And I totally got it. I absolutely got it at that point. And then

she would give me an example, she would walk away, and I would look at the numbers and the letters in front of me and think, I don't know. I don't get what I'm meant to be doing here.

She could come back and re-explain, and I'd totally get it. I would absolutely get it at that point. And then she'd give me another example, and I'd be a bit, hmm, don't really know. And I think Isabella will laugh at this because she knows I don't listen to music. I have exactly the same thing.

If I'm driving in the car, music can come on, and I can sing along to that song at the absolute top of my voice. I am brilliant. I am amazing. No one else can hear me, so it's all good. And then I drive through, a tunnel and the music fades out, and I end up sort of [WORDLESS SINGING]. No idea. Back to being that incompetent child looking at the maths. Out the tunnel, music comes on, back away I go, and I sing along. And it's all good.

And so this really fits in with what Ellie's talking about. Can you explain out loud-- if I'm doing anything, if I'm given a tutorial, if I'm going to a conference presentation, I need to be able to say it out loud. Because for me, saying those key points means I'm really thinking about what it is I'm doing.

I was once told by a really key mentor that if you can explain-- if you understand something, you can explain it to a six-year-old. Now, I don't have a spare six-year-old, so I use my study buddies. If you can teach somebody, brilliant, because they've got the why, why factor, which will help you. Again, child probably helps with that as well.

But I say, my study buddies are a horse and a tortoise. Both are brilliantly well educated. Both have a really good idea of how to run conference presentations. Because just speaking it out loud, you realise whether you're whiffing or whether you are actually saying key points. So, yeah, absolutely go with the study buddies. And the horse does occasionally listen. And then, once you--

ISABELLA HENMAN: I think that's an interesting thing, Lucy. Sorry. This idea about explaining to somebody else-- if you understand enough to explain to somebody else. I mention that in tutorials to people at different points. And I think this idea of a pyramid of understanding is that it's all very well talking about interpreting and using, but we understand in the first place. It's foundational, and how do we understand.

As I mentioned at the start, this information, you're reading it from your module, it's going into your brain, and it's jiggling out and there. And you're understanding it and you're explaining it. But what about when you need to explain it for a particular purpose? So, how do you know-- and Lucy, I'm going to come back to you here now. How do the purpose that you're going to be explaining it to? What clues are there for that?

LUCY ANDERSON: So, I think if you're doing this for the Open University and your module, absolutely look at the module guidelines. Because quite often you'll find your module guidelines will tell you who your audience is and what level you should be thinking at. You can ask your tutor. You can have a read through study guide, what have you. But if you don't have that advice, think about-- a good rule of thumb is, what do I know now compared to what I knew when I started the module?

So, I sometimes think of this as current me, present me, and past me. OK? So, what does present me know from my three weeks' worth of reading my module materials that past me didn't understand. And you could think about this for anything. So, I'm a bit rubbish at making cakes, but I could have a discussion about somebody about how to make a cake.

If they know nothing-- so present me, I've learned how to make a cake-- I could explain to my past me, well, I need flour, eggs, butter, blah, blah, blah. If I'm then talking to somebody like Isabella, who does a

lot more baking, I wouldn't describe the fact we need flour and eggs because she knows that bit. But we might talk about the type of chocolate that's going to go in, which obviously would be milk because that would be the nice, happy interlude between white and dark.

You might think about a particular mixing technique, or you might use a particular recipe. And if you're going to use particular recipe or something which has come from somebody else, you're then going to be giving that person credit. And I know this isn't about referencing, but it's about making sure that if I was giving Isabella a Mary Berry recipe-- or Mary Berry an Isabella recipe. It doesn't matter. It goes either way-- I would make sure that the person who devised that recipe gets the credit for devising their recipe.

ISABELLA HENMAN: That's an interesting thing. I'm going to come back because obviously I could talk about cakes all the time. But we're supposed to be talking about interpreting theories and using theories. And this idea about past you-- but before I come back to that, we've had a fantastic comment from Natasha in the chat, that she said she did explain to the customer service department of her bank. And they want to study with the OU, so that's fantastic. If you can explain to the customer service section of your bank, then that means--

LUCY ANDERSON: That is brilliant.

ISABELLA HENMAN: --you really know. It's fantastic, isn't it? So, maybe Natasha could be thinking about the past her. So, the previous time, maybe, she phoned a bank, what kind of things were different? And actually, is she ever going to come back to that person? That's probably taking it a bit far along that line. But this idea of past me and future me, and this idea-- some people might think that resonates with them. So, what kind of things do you need to explain? Where do they fit in with your understanding? Because it's the you've learnt something new, and some people think about the acquisition of knowledge. But it's not just acquiring knowledge for knowledge's sake. It's what you're going to do with that. It's Remember, our title is interpreting and using theories.

So, this information that you've brought in that's gone into your head and jiggled around, what are you going to do with it? You're going to use it. And, as Lucy mentioned, you will cite the information. That is quite important, and we said-- we'll give you the link to the referencing the library does later. We won't come back to that because otherwise I'm sure we'll get distracted.

But I've just realised, we asked you a question. We asked you about study buddies earlier. We showed you Lucy's study buddy. But HJ, has anybody been sharing in the chat pod? Is anybody sharing any study buddies? Have we got any?

HJ: We've got lots of study buddies that join us. All different types with differing numbers of attitudes to our studies. Michelle wants to borrow Marmalade because apparently her cat looks at her in disgust and just walks off. So, not very attentive cat there. It may be saying something about what you're talking about.

Carrie's cat just walked all over her laptop. I'm not sure that's helpful for thinking about our theories.

Sasha tries to explain everything to her son or any family member she can grab within 10 feet. Ashanti likes to talk to her children about her module. But apparently, it's often met with boredom.

Karen's very good at getting her husband to listen to her about what she's studying. Apparently, sometimes the reception isn't that great, but I think it's all about just getting it out there and just talking about it, is the most beneficial thing. Because sometimes, when we're reading and we're not really saying anything, we can pick stuff up a bit differently if we're saying it out loud. And Tina has a great tip. She said, I've actually started recording my talking to a non-existent audience on my camera.

Said, until now, I felt crazy doing it, but it helped. And it's good to listen back and think about things in a different way.

ISABELLA HENMAN: Wow. Thanks, HJ. And I understand that Ruth actually explains to her Uber driver. And she's actually discovered that a number of her Uber drivers have been OU students, so it's fantastic. The OU gets everywhere. So, it's really good, this idea of explaining to different people. Even if, as you say the reception, isn't that good, I'm sure that husband that was being spoken to, those children that were being spoken to, they are learning something.

And even if they turn around and go, [VOCALISES], or whatever not-nice expression, I'm sure they're learning something. And, as you say, HJ, the speaking out can be really important because you're conveying it into words. And actually, that conveying into words, I think, is really important. Is there anything else you want to add, HJ? Any more things we've got?

HJ: It's just great to hear. So, Catherine said that she actually met with her study buddy yesterday, which was very helpful. So, sometimes it's not pets and animals that like to run away. It is actual people who want to listen to us. Janine has very philosophical debates with her primary school child, which I think is absolutely fantastic. And Natasha's iPhone is her study buddy. So, what she does is she takes photos of what she's studying to think about it, or records herself.

That's only if a bank clerk is unavailable, of course. But apparently the bank clerk is the primary study buddy at the moment.

ISABELLA HENMAN: Fantastic. So it's lovely to know that people have are really engaging and are thinking about these ideas. So, I'm going to move on and I'm going to come back to Ellie for this next discussion. So, we were talking about using people's ideas. And we were thinking about this idea about citing and using it.

So, sometimes-- and I think, Ellie, you might have come across this because you mentioned you work in science and you've got some papers. What happens if somebody uses somebody's ideas, and they don't mention it and they don't say it's their idea? What kind of things happen then?

ELLIE DOMMETT: So, I think there's a couple of things, really. I mean, from an academic integrity approach-- so, if I were to write a paper and cite a theory or some ideas that weren't mine and not give credit to the person whose ideas they were, that's not good for me. So, that would damage my reputation as an academic. At worst, I would be accused of plagiarism, which is quite a big deal.

But I think the-- so, it is important that we cite work to avoid negative consequences. But there's a kind of flip side to that, as well, that if you cite an idea or a theory that isn't yours and it turns out to be wrong, actually, it's better that you attributed that to the original author. So, as an example of this non-academic example, when I grew up, my mum had this particular flower growing in the garden. I really liked it, and I said, what is it? And she said, I don't know.

And I thought the name of the plant-- I mean, literally, for about the following 30 years-- I thought the name of the plant was called "Idonno." And actually, she was clearly just saying "I don't know." And it was only years later when I had my own garden, I said, I'm trying to get some "Idonno." And she said, what are you talking about?

And I said, you said it was called "Idonno, at which point, she gave me the Latin name. Which I promptly forgot, and I still call it "Idonno." But the point is, if I'd written that down, if I'd said that publicly somewhere, it'd be much better if I'd said, actually, my mum told me it was called this, because I would look less silly when it turned out that wasn't the case. So, there's that kind of reason to get it right.

But the other reason is actually-- so, I think it's nice to say not why wouldn't we give credit, or what happens if we don't give credit, but to turn it around and say, what happens if we do give credit? And I think that is something that's often perhaps not necessarily recognised, especially if you're not somebody researching or working in the field and publishing ideas. So, there's several reasons to give credit. The first thing is, I think it just increases your familiarity with researchers in the field, and it sort of increases your sense of belonging within a discipline.

So, Isabella said, learning isn't just about acquiring information. Actually, I very much subscribe to the belonging view of learning, that as I learn information, as I learn about subjects, about the world, it changes me as who I am. It changes the essence of me. I'm a very different person now to before I started my most recent qualification, and the same for the one before that.

So, I think referencing allows you to increase in familiarity-- or citing, I should say, citing. Whether it's in a presentation, you might just mention someone's name, or a written form where you might formally reference. Citing allows you to feel more part of that discipline, part of that community, and it brings that understanding more within you.

The other side is for the person who you're citing. In research, in academia, we actually-- whether people cite our papers or not determines whether we get promoted. That's literally what it comes down to. So there's that side. But it's also just really nice.

I had a student on one of the master's programme-- so I did a master's with the OU. And then, the following year, somehow or another, I came across a student who was doing the master's after me. And they cited a paper that I'd written based on my EMA for the module. And it was really nice to get an email saying, oh, this is great. It's really lovely to see what other people on the module have done and to be able to cite your work. So, that's really nice.

And then, also, I had my little starstruck moment where I met somebody who I'd cited for years and years, and I was a little bit embarrassingly starstruck when I actually met them. Like now, I look back on it and I think, that was really embarrassing. But I knew the name because this was a person that changed how we understand depression and the role of genes and the environment in depression. Their research was groundbreaking.

And I was at an event at University, and they introduced themselves. And I was like, as in-- and cited the paper. And they said, yes, that was our work. And then I proceeded to look like a bit of an odd science fan and an idiot for a little while. But, actually, they were really great. They were really pleased that I was using their work in my teaching and in my research. And they said if I needed anything or I wanted clarification to get in touch. So, it was really nice, but it was a little bit embarrassing.

But still, it's good because I was crediting their work. And actually, it served as a good introduction to somebody. So, that was quite nice.

ISABELLA HENMAN: That sounds lovely. And I'll come back to a point in the moment about community in the Student Hub Live community. But Aisha's asked us a really interesting question. She said, what happens if you arrive at a theory or an idea by yourself-- rather, you think you've arrived by yourself-- but then you actually find that somebody else has done it before you. You just didn't know that. Have you ever come across that, Ellie? Is it something that you're aware of?

ELLIE DOMMETT: Yeah, I mean, it does it does happen. It happens less nowadays, I think, than it did previously because most of the research that happens now is more openly available. So, you go back 20, 30 years, you might only be able to learn about a theory if you went to a university library and buried

yourself in the basement looking at what was then a journal that only came out in print and only went to certain subscribers. So, it does happen.

One of the ways you get around this-- I know one of the ways I always get around it in my own papers-- is I always say, to my knowledge, this is the first study to show x. Because there may be another study that shows it, but I'm saying that there are clearly limitations to my knowledge. There's limitations to everyone's knowledge. As far as I'm aware, it's the first one that's done that.

Someone will tell you if they did it before you. And then, as was brought up by HJ earlier, then you have the option to publish an amendment. But it does happen. And the other thing is that sometimes two people can come up with the same theory but from different directions. And actually, if that theory went on to be world famous or something, it would likely be named after both of them. And it would be strengthened because of that because they perhaps have used different types of evidence to come to the same conclusion.

So, it does happen. And we can all be forgiven for not knowing a field inside and out as long as you've done enough homework and looked and been reasonably confident that something hasn't been established or theorised before. And then you go forward and do it.

ISABELLA HENMAN: Thanks, Ellie. That's really useful. I think, for many students, if you're looking at that and thinking, how am I going to know? Don't worry, because particularly if you're access level one and most of level two, you're not going to be expected to go out and look at lots of different journal articles and find all the research. Everything is in your module materials. But those of you, as Ellie was mentioning, the master's level, that's where you're actually going out and you're looking much more broadly at things. Now, we have had a few questions about referencing coming in. And we said, we always know whenever we talk about referencing that people go, ugh. So, just to clarify, citing-- Ellie was talking about citing. Citing is where you're actually saying the person's name. And if you're thinking about when you're actually writing something within the text-- the in-text citation, as it's called. So, you might be, this the theory that chocolate is great, Henman 2022-- dark chocolate is great, sorry. I got the wrong theory there. Which is much better than the theory that white chocolate is better. We're not even going to cite HJ on that one, but we'll pretend we have.

But then, at the end of the piece of work, then you've got the full reference list where you would say the point at which you read it. So, your module materials will give you lots of information about referencing. And the library does do very useful sessions on referencing. And hopefully we'll be able to put a link up on the screen there for the link to the library referencing.

So, it is something, as I said, we didn't specifically want to cover today because people do get a little bit worried about referencing. But it is worth knowing that it is something that you do as an academic. And, as Ellie explained, it's because of-- you're giving credit. And it was interesting when Ellie mentioned it. I remember, actually, in one of my modules where we had to cite a particular piece. And at that point, they hadn't changed it, and they hadn't come back and said, actually, we were wrong.

And all of us were marked wrong. And then we all went, hang on a minute. We used this particular piece of information and then went, ah. OK, yes. There's a retraction being published. We just didn't tell you it'd been published yet. I'm like, hmm, OK.

So, hopefully, you should see now up on screen some of the information about referencing. Our OU library is absolutely wonderful. There's loads and loads of information there, and they run live sessions. They hold the guides, so cite them right. The Harvard School of Referencing.

Your module will also have information, as well. But if you want some general information, the library do pre-recorded and live sessions. So, that's always a good idea to look at. So, I mentioned earlier, and I'll try and bring back my train of thought, Ellie was talking about the science community. We have a community in Student Hub Live.

One of the reasons why we have such engaging chat and one of the reasons why we do these things is because we are cross-university. There are people from different modules, and I know we've got people from access modules. We've got people from the science modules here. We've got people from all sorts of different areas. But we are about looking at study skills, and we're about building the community, because we are a distance university. At the end of the day, we are.

We're all studying from different places. And in the workshop yesterday, we had some very exciting places. If I remember correctly, we had Peru. We had Canada. We had Poland. We've had Portugal before. I think we've had Ghana before. We've had Oman before. We've had people from all sorts of places, which is lovely.

And the OU community, in the same way that was mentioned earlier, the Uber driver was an Open University student. And the bank person wanted to become an Open University student. And it's lovely to have that community there. And that's why we quite try and share things and we join together.

So, I'm going to come back to Lucy now here. So, we were talking about these ideas and using information. So what kind of additional guidance can you give to students about how you would use information? This possibly links back to the question we were asking earlier about how do we approach things. How do we know what's going to guide us?

LUCY ANDERSON: So, again, I go back to talking out loud. You're going to think this is a really noisy household. It's not that bad, honest. But I try and think about what is my absolute key for understanding a mechanism, or a topic, or an experiment. What are the really, really key points that I need to know in order to be able to move on and do that?

So, for example, if Ellie was going to be talking to me about one of her experiments, she might say, well, I had two experimental groups. One had a drug, one had a control. I sectioned some brain, and I looked at different aspects of brain structure. That would be enough for me to get an understanding of what it is that she has done.

It wouldn't necessarily be able to enable me to re-enact the experiment. But I can have a feeling for those really key points. And once you've got those really key points, what the researcher wants you to look at, what they did, what they found, you can then go and flesh them out and to give more detail.

So, again, because I'm a scientist, one of the examples I often give is lots of students will tell me that ions cross a membrane. Which is true, they can. And that would probably be worth a mark in your assignment. But if you could tell me which ions, so if you said sodium ions cross the membrane, well, that's two marks. If you would go through and tell me that they cross the membrane through a channel, so sodium ions cross the membrane through a sodium channel, that's three marks. So you can take your very basic key points, and you can build them up as you go to increase your marks and increase your details. And you can think of the same thing-- I can go back to my baking analogies.

My husband bakes brownies. He puts nuts in his brownie, which I know some people disagree with. But it's really important. You can't just say, add nuts to brownie. Because if you use peanuts, well, they're the wrong size and taste a bit funny. If you use hazelnuts, you run the risk of choking yourself to death. That's really quite terrifying.

Brazil nuts are too big and don't really work. They go a bit funny when you cook them. Walnuts are too greasy. Pecans are just right. So, trust me, I have expanded while I have tested all these different versions. And that's a way of showing how you're adding detail and building up your understanding. So, you've got your key point. We add nuts. Your detail, then, is, well, what type of nuts? Or your ions move. Well, which type of ions?

I know my examples are very much science based, but you can think of this for absolutely anything. So, if you were thinking about history, you might say, a royal did x. A royal went hunting. Well, what sort of royal? Was it a high-up one? Or is it some lesser known common duke of so-and-so?

So, if you said a king did, a king went hunting, well, that gives you a bit more information. You know what level of royalty we're talking about. But which king? There's been a lot of them. Perhaps King Henry went hunting. Well, there's also been a lot of Henrys, so that's probably a really poor example. So, perhaps King Henry III went hunting.

The important thing is there. You can stop at that point. We know exactly which king did something, and that he went hunting. You don't need to know that King Henry III, who was born in Winchester in 12-something-or-other and was crowned in 12-something-else. You're giving just the key points. Again, if we think about past you and current you, enough key points that current you could explain it to past you, but not so much that they're bogged down in the detail of the unnecessary bits of information. Does that make sense?

ISABELLA HENMAN: It does. And I'm actually thinking about this idea and my pyramid idea of a building on things. So, we're talking about-- and, as you know from my facial expressions, we have had this conversation. Nuts shouldn't be in, dark chocolate best, and the research gap. Natasha's come in and asked us about this research gap. And some of this is, how do we deal with this?

So, you were talking about the detail and knowing what's actually relevant. Because you could actually go and find out all sorts of things. You could carry on researching, and reading, and reading, and reading. And I remember some advice I was given in one of my first modules as a master's where my tutor said to me, Isabella, you have to stop researching at some point.

I said, but I like researching. It's lovely. I think Natasha said she's addicted to researching. Dark chocolate. Well, yeah. Obviously, same here. But there is a point where you have to pin it down, and I often refer to this pinning it down idea. Right, OK, so you've got some ideas. You've got the things. Which bits are most important?

You've got your base. These are your details. What are you going to get the marks for? The module materials often, as you said, they have all this additional things. Yes, OK, he was born in Winchester. Does that help you answer your particular question? So, it's this idea of pinning things down, bringing things together, and actually going, right, what is actually important? What do we need to know to answer things? Is there anything else you want to add to that, Lucy?

LUCY ANDERSON: No. I think, again, go back to your model materials. And if you're doing this in an assignment. Look at the amount of marks that are awarded for a question. So, if you've got a question on what sort of brownie baking is great, and it's worth 10 marks, well, probably the answer is chocolate brownies. If it's worth 10 marks, the answer may well be chocolate brownies with pecans, baked in a particular way, put in the oven for a certain amount of time, come out with it nice and squidgy. If we go back to example-- me and Ellie talking about research, she might tell me how she sectioned her brain. She might tell me the staining technique she's used. Because they are things that are interesting

and are going to help us understand exactly what she's done. She's not going to tell me that the serial number of her microscope is Zeiss X12 number three because that isn't relevant. It doesn't help me understand the experiment. It just gives a little bit more information that would be relevant if I was replicating that experiment, but not for a general understanding of what has happened.

ISABELLA HENMAN: Yeah, I think that's really important. And it's this bringing about-- you can put in lots of things. We're interpreting ideas. We're using them. What do we need to use them for? Is there anything else that's irrelevant?

So, where you were explaining to somebody else where you've gotten the blank looks from the husband, or the child is going, hmm, I don't know, maybe say to them, OK, does this bit make sense? If this is my question, do you think this is important? I mean, they may not know because if they're not studying something, they're not going to the ideas. But at least it's some ideas.

So, we've asked you a number of questions. And we did ask you a little while ago how you'd feel if somebody used your theories. And I know there's been lots of chat coming up in the chat box. So, HJ, what kind of things have been coming up? Is there anything else? Any questions that we need to answer? Any things that people want to say?

HJ: Well, we definitely agree that we'd be unhappy if someone else uses our work. Lindsay says she was really unhappy when the library did this about a leaflet she wrote as a volunteer. So, definitely credit people for their work. It makes them feel very good. I know if someone credits me for my work, I feel very happy. And I think that's something to keep in mind.

And it also helps other people. We've been discussing this in the chat. Because if someone else wants to look a bit further and gain more understanding, then they know exactly where to go to find that out. I know Ian made the point very succinctly, saying, why should we expect our own ideas and observations to be credited if we don't credit those of others? And I think that's exactly the point. Just thinking about how we would want our work and our efforts treated, and translating that into what we do with our work as well. So I think that's a very good and succinct way of putting it.

ISABELLA HENMAN: I think so. And actually, if you go back to Ellie's example, if you've cited somebody, some of you listening are going to go on and you're going to have fantastic careers in academia. Just imagine, somebody comes up to you at some point and says, I used your study. I did that. And you're just like, oh, that's really nice. Somebody knows me. Because we're all that. And it's part of the community, and you're part of the learning community, with the OU community, with the Student Hub Live community, and all sorts of ideas.

So, without wanting to sound negative, we often get asked, well, it's OK. I'm all right so far. But what do I need to look out for? What could go wrong? So, we're going to finish up with a bit of a together conversation. But I'll come to you first, Ellie. Are there any pitfalls that you've come across? Is there anything you can think of that you would want to warn students against?

ELLIE DOMMETT: I think it's very unlikely that you only consider one theory or one type of evidence in any discussion you're having. So, there can be a tendency to focus on the bit you like the most. And I think one of the key things, one of the key skill, not just for writing or academic assignments, but actually for all manner of things in the workplace, in the home, is to be able to show balance.

So, if you're asked to discuss two theories-- and you're doing this, perhaps, in a presentation or in an essay-- don't spend 75% of the words or the time available on one of those, and then squeeze the other one in afterwards. Go for a balance because that shows that you have engaged with all the material

equally and you understand it all, rather than I understood all of this in great detail, and then I plonked that on the end because it was written in the question. So, it's ensuring that you balance your discussion, whatever that is. Actually, all pieces of debate or academic writing should always have a balance.

ISABELLA HENMAN: I think that balance is quite important. When I used to be able to do face-to-face tutorials, because I'm in front of a camera, I used to do this to what extent. And I'd say to people, you've got two different things. To what extent are you near here? If you're near here, you're not near here. But if you're near here, you're not near here. So, are you actually discussing all of them?

As Ellie said, you can't just go, I like this idea. This is what I'm going to focus on. Nope, sorry. You've got to appreciate them all. So, that's a really important point. Lucy, what are the points-- are there many pitfalls that you would warn our students against?

LUCY ANDERSON: I would say very much make sure that, if you are interested in the subject, by all means, go around, read about the subject. Read your module materials. Read external sources from your module materials if you are interested and keen and want to have a read around. But do remember that you should follow your module guidance about external sources.

So, if you are writing an assignment, you're not going to get marks for going outside of your module. Even if what you have written is absolutely amazing and brilliant and is world-class research, if it's not what you're asked to do and it's not in the module materials, what it actually does is it means you waste your word limit, or you waste your time or your capacity. And what you're doing is not writing information that's come from the module materials.

So, always defer back to your module guidance because your module guidance is there and has been written for you by us to really make sure that you are focusing on the assignment, the questions, the formatting, things that you need in order for your assignment. So, if you're excited by something, always read it, but defer to your module.

ISABELLA HENMAN: Yeah. I think that's so important because one of my colleagues, Rob, who does the online workshops with me, he says things like, banish the fluff. We can't give you marks if it's not there.

And it's great, it's lovely that you've read it, but please don't. Because it's very frustrating as a marker because you go, you've expressed that really well, but it's not relevant to anything.

So, HJ, I hear that you've got lots of things coming in. What kind of things have people been talking about?

HJ: Well, for us, we definitely agree with what's been said about sticking to the module. And I think some of us experienced OU students will definitely know it's something that takes time, and it's definitely not something that we need to worry about because over time our writing skills will develop. Our skills of analysing and looking at different theories.

I know when I was starting out, I got really excited about certain parts of a topic. And then all my assignment would be written about that rather than what I've actually been asked to do. So, we definitely agree that it's something to focus on. But it is also something that takes time for us to develop. And there's lots of support. So, a lot of people are saying that their tutors are really great at clarifying things. So, if we're not kind of sure if we're on track or if we're going off, there's always help and support from our tutors, in the module forums, and the library sessions as well. We must plug them again because I've attended a few library sessions, and they are absolutely fantastic. And the good thing is, like Student Hub Live, library sessions happen throughout the year so it's something that you can look at a pre-recorded

one, or you can join in live, and you'll definitely pick something up there, as well. They've got ones on referencing, using materials, doing research as well.

May not be so applicable if you're just starting out. There's lots of people in Y032. That's something that may help you in the future.

ISABELLA HENMAN: Thanks, HJ. And that actually links really nicely to something I was just thinking about, as you were saying. We obviously-- Ellie, Lucy, and myself, we work for the University, and we studied with the University, as has HJ. So, some of what we're saying to you is based on our experience. And what we're actually trying to do is say, don't make the mistakes we've done.

We've made those mistakes. Honestly, we've made those mistakes. We've kicked ourselves. We've lost the marks. So, I know you might be thinking, well, it's easier said than done. And there's lots of things you'll be thinking, oh, crumbs. So, how am I going to get that far? But it's not about that. It's about a learning process.

And this idea-- I'm going to keep going back to this idea. I should have a pyramid to build, so I'm just using my hands at the moment. But you are gradually building. You're on a learning journey. What we're trying to give you is a few little tips to help you. And we're trying to say, you know what? When we did this, we really messed up this stage. Learn by us. Don't do what we did.

But it is a learning journey. We still all do these things. And you have to learn for yourself. And there was something I was thinking about earlier when-- I think it was when Ellie was talking, and learning about learning through doing, and it's something called the participatory mode of learning. And I learned about it in one of my modules.

And I was very much about knowledge acquisition. Coming from science, I was like, it's mine. If it's in here, it's mine, I know it. But actually, I've much more come to this. We're learning with each other. We're learning through things.

The reason why we do these events, the reason why we have community and Student Hub Live, is because we're all learning from each other. I think it's fantastic that-- we keep coming back to Natasha-- that she told her customer service in her bank, and was talking to the Uber driver. And you explain these different people, and you're bringing people in this. This is the idea. You're learning through others. You're learning through explaining to others. So, that's a positive.

So, I need to rein in my enthusiasm. So, Ellie, have you got any other things, any other recommendations? Pitfalls or like that you want to say before I carry on?

ELLIE DOMMETT: I think the only other one, which it ties in nicely with what you've just said, is that when you're writing an assignment or preparing a presentation, whatever it is you've got to do, for a moment, take yourself out of the student mode and imagine you are part of that community. So, if you're writing a piece for a science module, imagine you are a scientist or a researcher in that field because I think then you start to think critically. You start to think slightly differently.

And then it becomes part of-- I mean, obviously, we've all been or are students. And it very much is often about the grade we achieve. But actually, if you set the grade aside for a moment and think, actually, I need to learn through doing this assignment, so through actually engaging in the assignment is going to be a learning process. If at the end of it I get 75%, that's great. If I get 45%, I might think that's less great. But I've still done it, and I've still learned through the process.

So, I think putting a professional or a researcher or a scholarly hat on to do your assignment, rather than putting the hat on of a nervous student or a worried student worried about the grade they receive, will not only change. It might create clarity for you in writing. But it also changes what happens.

All of us receive feedback on our work. They're not necessarily TMAs or assessments for University, but we all receive feedback of some kind. And sometimes it's a brutal process. Sometimes it's supportive and nice. But it is about just recognising that all of that is part of the process, and all of that is part of the learning. And actually, sometimes you learn more from the feedback than you ever learn from any grade or number or individual fact.

So, really, it's just put yourself into the thing you're trying to learn about. Don't try and write about it. Try and become it, is probably the best way to put it.

ISABELLA HENMAN: I think that's a fantastic idea. Now, we've had a question come in which was about can you oversaturate yourself with knowledge because we're talking about reading around. And I think sometimes you can. You can just feel that your head is buzzing. And I was saying when I came here this morning that often I find it difficult to go to sleep at night because my head is buzzing about all the different things that I've talked about in the day, the things that have been going. So it is possible that you can.

And I actually want to bring in something that we weren't going to talk about, but it touches what Ellie was talking about, that anxiety and worry. I know we've got a lot of students who are very anxious. And sometimes that can affect the way that you do think that you can't put yourself into that perception that Ellie's talking about. You can't actually see yourself yet. You're still worried. You can't get out of that worried student.

We've all been there. I've been there, where you just get so pent up in myself, and I'm thinking, I can't possibly do this right. But remember, it is a journey. Nobody expects you to be perfect. And some people are perfectionists, and they're looking and they're thinking, somebody's going to look down. If I don't get 100%, if I don't get 95%, then I've failed. No, you haven't. Not at all.

It's this journey. It's the learning. The reason why we're trying to encourage you for thinking about these things is to go, right, visualise yourself. And some people actually like to do that, almost like a photo or a poster or something, visualising where do you want to get to. OK, it's steps along the way. And you can go along the way. You can see yourself, like if you're a scientist, or if you're doing a science module and you want to be a scientist, you have your picture. This is what I want to do.

If you're a historian, you have a picture. You have a picture of the British Museum or whatever. This is what I want to do. I want to be that person that's doing that. Or, I want to be the languished or the lingered or I want to be that lawyer. See yourself, and believe in yourself, and make use of all the guidance that you have. HJ, has there been anything that's else that's been coming in along the way there?

HJ: I think we've got some really good discussion. So, Nikola says that she has been guilty of going in on the facts she enjoys more than what the question is asking, which I'm guilty of that as well. I'm very practised at doing that. Susan's got a really good strategy, though. She says that I find if I initially block out number of words per item or point to use, it does help me focus on where I'm putting the fluff in.

I think that's a really good point because we know how many words we've got to play with and what points have we got to cross. So, I think it's good to have a method or strategy that you use for planning. Karen says, it's not fluff I add. It's more, oh, I forgot about this bit. It is good. I'll put it in. Yes, I know that as well.

And I think Karen represents a very good and positive attitude towards feedback. She says, I am a feedback addict. I love it, good or bad. And I do as well. I think it's really exciting to know how you've done and get the feedback and what you can take into your new assignments. Because that's what's feedback is for. It's not to bring you down or say you've done something wrong. It's to help build you up. And if you come at it from that perspective, I'm sure you'll become a feedback addict as well.

ISABELLA HENMAN: That's fantastic, and that's a really good way. HJ, you said it's not about bringing you down. It's not. And these ideas, the things that we're telling you about, the learning from our experience, is to try and help you. And I always say it. We don't expect you to be perfect. Nobody is perfect. Nobody's going to be this person that gets everything straight away.

It's a learning journey. You're learning along the way. You're learning through the doing. You're learning from the feedback. You're learning from the research you've looked at. You're learning from explaining to your cat, or your horse, or your tortoise, or your six-year-old.

So, Lucy, have you got any other points that you want to add? Any recommendations for our students?

LUCY ANDERSON: I think my final-- I mean, the reason I like my four-legged study buddies is because they are my time out. So, there's a limit to how much you can learn and how much you can do. And you can saturate out, and you can get to that point where you're reading through the page and it all blurs and looks a bit peculiar.

Take your time out. Take the dog for a walk. While you're walking around, just have a gentle, slow recap. Think. We all know that, at 4 o'clock in the morning, we can wake up with the exact answer to the crossword clue that had baffled us the night before. So, taking time out, sleeping on it. They're old-fashioned remedies, but they are really helpful, especially if you're winding yourself up about saturating out.

Because remember, this is fun. You're all learning because you want to learn. You're here because you want to be. Nobody has dragged you kicking and screaming. So, think of it as being fun. This is your opportunity, assignment to your opportunity, to show what you've learned. To really demonstrate your understanding. And then to demonstrate, from one assignment to the next, how you are improving on your bite-size journey.

And it doesn't matter whether your bite size is a big old chunk that might really make you cough and splutter, or whether it's a tiny, little nibblette on the spoon. What matters is that you are incrementing away along your journey.

ISABELLA HENMAN: I think that's how I approach--

LUCY ANDERSON: So, enjoy it.

ISABELLA HENMAN: Yeah, absolutely enjoy it. And linking back to the chocolate, that's how I approach my chocolate. A little bit, nibble it on the spoon, until I discover I've eaten the whole bar. But anyway, that's me. And remember, kids, dark chocolate. We don't do this white chocolate rubbish.

So, it's great for all these suggestions there. If I was going to ask you to sum up your take-home message in one sentence. So, I haven't warned you guys that we're going to do this. So, Ellie, I'll come to you first, then Lucy, I'll come to you, then HJ. Your take-home message about interpreting and using people's ideas in one sentence. So, Ellie, what would you say?

ELLIE DOMMETT: I would say, treat it like you are trying to train for an ultramarathon. You start off with the small steps, understanding the small things, and then you build on it. You won't get it all overnight.

ISABELLA HENMAN: Fantastic. Thank you, Ellie. Obviously, clearly, you are the ultra marathon person here, not me. But anyway, we'll go with that one. Lucy, what's your sum-up in one sentence?

LUCY ANDERSON: I think I'm probably very similar. I would go for the bite-size steps, explaining it at every level to your six-year-old so you're building on your key steps, and you're building in more and more detail as you go along.

ISABELLA HENMAN: Fantastic. HJ, what about you? Is there anything either from your perception or your experience as a student, or from the hot desk? Oh, HJ, we can't hear you. Sadly, we can't hear you, so we've missed your pearls of wisdom.

HJ: Oh, no. We've missed by sentence.

ISABELLA HENMAN: Oh, no.

HJ: I was just saying how white chocolate is better.

[LAUGHTER]

ISABELLA HENMAN: No. You see, that's why you were muted.

HJ: That's why I was muted. What I'd do is just echo Lucy and Ellie's point, though, that it is something that takes time. It's something that we learn and develop, and it doesn't come straight away. And that's OK. And it's a learning process, and that's what it's all about. And eventually, our confidence and skills will grow, and we'll realise how far we've come.

ISABELLA HENMAN: Fantastic, thank you. So thank you, Lucy. Thank you, Ellie. Thank you, HJ. Thank you, Chenoa and Suzanne.

And thank you, everybody that's engaged today. I hope you've found this useful, getting you some of the ideas, thinking about things. If you're interested, we've got another live broadcast coming on the 23rd of March, which my colleague Rob will be talking about something else, which has completely slipped my mind at the moment. You can tell it wasn't one I planned. But we've got regular workshops, the online workshops, which normally I talk about, and we talk about critical thinking and analysis for the next two. And you can always find that information from our main website, studenthublive.open.ac.uk. And we always welcome feedback through our email, as well. So, hopefully you feel that you've learned something today, and you're going to go away inspired to eat dark chocolate and make those learning journeys and take those steps. Remember, one step at a time. It's your learning journey. You're learning through the doing. And visualise what you want to get to, and then you'll get there.

So, I hope you've had a great time today. We certainly have.

[MUSIC PLAYING]