**Teacher 1**

Researcher 1: Great! Okay, so, to start off, the national curriculum for Key Stage 1, but I think also Key Stage 2, says that people should be taught to make inferences on the basis of what people will say and do, and what's being said and done, in just sort of reading and... For you, what kind of inferences do you understand this to be talking about?

Teacher 1: I start by saying, I think, it's trying to get an idea that, children need to go beyond their understanding of the kind of the literal meaning that can be derived from a text. And the variety of inferences that might involve is broad. It might be the case that they have to work out something as simple as what a pronoun is referring to, or what ‘it’ is referring to, because it's not directly stated. It might be the case that they are having to work out kind of read between the lines, which is sometimes how inference is framed; read between the lines to work out the emotions of a person; they might need to understand a particular metaphor that might not always be clear without their knowledge of it.

I mean but, more generally, rather than try and kind of pin it down to different kinds of inferences, I think, the way that I understand it, and the way that kind of it, I see it, imparted or attempt to be imparted in classrooms, is this idea of bringing something that the child or the teacher knows in to bear on the literal meaning of the texts to say, ‘Look, the text says this. But we can go beyond that, if we bring in some knowledge that we have about the world, about the individual words in place, about the way these words might interact, in this case.’ So that's kind of how I understand inference and how I think most teachers kind of grasp it.

Researcher 1: Yeah that's helpful. Yeah I should have said feel free to refer not only to your own experiences, but to kind of your experiences of being in school as well, if that’s relevant.

Teacher 1: If I may, sorry, just quickly add. I mean why, inference for this reason, for I think something that you might be kind of touching upon is this idea that there tends to be an attempt to categorize different kinds of inferences. I think because inference is such a tricky thing to teach and for reasons that I'm sure we'll get into, there's this tendency to say, as soon as something seems quite tricky and nebulous, what we need to do is to break it into categories that we can then teach one by one. And I think that's a wider problem with the teaching of comprehension generally, not just inference as such. So you get people saying, well, we look at you know global coherence inferences, and local cohesion inferences; so local cohesion refers to the kind of bits and pieces I'm talking about there that allow us to interpret given link within a sentence - something that's, I’m nothing saying necessary. But that kind of brings us to the other kind of description of inferences that I'm sure you're aware of: this idea of necessary and elaborative inferences with the necessary ones being considerably more useful to the actual ongoing interpretation of the text. So in terms of the types of inferences that exist, I think it tends to only be people who read into the subject who find any particular use in saying, let's look at these categories of inference. I think, in a school setting we have this general sense that, but what we're really looking to do is - go beyond the text. But that doesn't mean necessarily that it's taught in a particularly productive way, or a way that I think aligns even with a common sense understanding of what inference is in practice.

Researcher 1: Well, that brings me neatly on to my next question, which is how do you or how did you incorporate teaching inferences into teaching reading or more widely across the curriculum?

Teacher 1: I'd say the most common way to teach inference that I've seen and, that for a chunk of my career, that I have done, is to think of inference as a generic skill that we can build up sort of layer by layer and as you get better at making inferences, you will then be able to transfer this generic skill to making inferences in another context. And because of that underlying belief it ends up being taught in a way that aligns with that belief. So what happens is we'll have learning objectives that say something like ‘I can make inferences’. And if it's trying to be more specific, it might say, ‘I can make inferences from an information text’. And what then tends to happen is that a teacher will attempt to create questions that require an inference, at best kind of model those inferencing questions and then ask children to do similar inferencing, you know, with a different set of questions that require a different set of vocabulary, background knowledge, perhaps. They will ask the students to now, ‘I’ve shown you what inferencing looks like. Now you do it in a slightly different context’. And that's the most common way of it being taught.

I don't teach and I wouldn't advocate attempting to teach inference in that sense any more. I'm much more prone to believe that inference itself is completely embedded within the vocabulary knowledge, the background knowledge, the understanding of syntax, that are in the text from which you are trying to infer. And so that the way that you actually support someone to make inferences is to make sure that they know - they have a broader and deeper vocabulary. You make sure that they understand essential aspects of their world that are likely to be discussed in information texts and stories and this sort of thing. You make sure that they understand punctuation and the impact that that can have on meaning. You make sure they understand things about the way the texts are organized. So, they recognize, for example, that italics can emphasize a word and completely change the meaning of a sentence. It's about the gradual accumulation of understanding about the vast array of specifics that exist in our language, not an attempt to go, ‘This is inference. If I teach you how to do it here, you'll be able to apply this somewhere else’.

The most common way for it to be taught in my view, relies on the misconception that it is a generic transferable skill. It's often incorporated within like a set of comprehension skills that are things like vocabulary, inference, prediction, summarizing, and... I think something like explanation and retrieval and it ends up being seen as a thing that you do, as I say, in a generic sense, rather than something that relies on, something like an emergent property of one's understanding of all the aspects of language.

Researcher 1: So yeah that's really interesting. You're kind of saying that how you see it now is that, if you, as a child, you have the background knowledge of the vocabulary, syntax, kind of text structure knowledge that you need, then the inference always just falls out of that.

Teacher 1: I think there's still something very active: I've worked with - it's rare, but I've worked with children who were pretty good at decoding and then just don't have this sense that they need to be actively monitoring their comprehension. They can't read the words and then go ‘why don't I understand’. Yeah well, let's actually put some effort into understanding. Let's recognize that it's our responsibility to understand that we are allowed to reread sentences. That you can ask me whether there's a word that you don't understand; that there is this sense of responsibility involved. And I think this is where the evidence around things like comprehension strategies, which often relate to things like inferencing and often relates to other aspects of language comprehension - where they seem to gain their benefit from.

Researcher 1: And just to go back to what you said at the beginning about how you've often seen inferencing taught in a way of coming up with questions that would prompt making an inference. And you mentioned that you might get a model to answer something from the teacher. Have you seen any particular ways of modeling, any particular strategies that would have been given?

Teacher 1: The only way that I can describe that is to say that, in terms of like modeling and such, it really is no. I've never seen it done in a particularly more complicated fashion than: 'this is a question, that I believe requires an inference; this is what I needed to do and what I needed to know in order to make this inference, and I explained that to you'. It's either that, or what a teacher may do is that kind of ‘Guess what's in my head’ style questioning, where they will say...So let's say that a question says that - or let's say that a text says that ‘Dad’s late home’. And we know from the context of the story that the children who are waiting for dad to come home should be perhaps worried, because he's gone to do something that might be dangerous. The teacher would then say, ‘Okay, so the question it's asking here: Why might the children be worried when realized that dad’s late home?’. They would just talk about what we know from the text that... And they would explain this stuff, that they explain the danger, the apparent danger that the father might be in, and why a late return home might represent something bad. Or they might, as I say, go down this questioning route and just ask and then give children chance to discuss it and see what they come up with. More often than not, what then happens is the children who have - I won’t say automatically but who have recognized that inference because they've got the knowledge and question that is related to this particular inference - they tend to be the ones who then feedback. Particularly when teachers, then say, ‘Okay hands up who knows the answer’. Then it's just whoever puts their hand up.

Just to kind of a side note related to this: I think, I mentioned before, I think that inferences are something of an emergent property. Something that kind of reinforce this idea for me is the complexity of inferences that very young children seem to be able to make about situations with which they are familiar. So, a teacher might say, ‘Oh, Robbie's not returned to class.’ And another kid who, and this, can be five- or six-year-old, and they can say, ‘Oh, you know what he's doing? He's going to look for his football in the bushes’. It’s like, did you see him do that? It's like nobody mentioned earlier on that he'd lost his football. And usually, when he loses his football it's in the bushes. And I know he loves football. So, there's this like long chain of connection between a kid not being in class and this kid working out exactly what's going on. It's just not in the context of a particular text. And it's something that this kid knows loads about: he knows about his friend; he knows about football at play time. So again when we watch films, I see children constantly able to make these inferences that go way beyond what the text is saying. Because it's something that they just know lots about that they're familiar with, and that they've had intimate experiences with.

Researcher 1: The next question: we've talked a little bit about methods, I guess - have you seen any other specific resources for teaching inferences apart from, as you say, making up your own questions for a text or anything like that?

Teacher 1: They always come back to this idea of an inference question that you would want to find the answer to. In terms of what I've seen in primary schools, often the resources themselves will be like a small text and then underneath it will be a set of questions that either it might be ‘Here are listed inference questions that relate to the text’, or it might be ‘Let's look at...’ So, for example, a very common way of dealing with this - because primary schools love acronyms - is something called 'VIPERS'. So it's a way of trying to teach comprehension that makes it simple for teachers. Says, ‘Look. Let's ask a vocabulary question; let's ask an inference question; Let’s ask a prediction question’. The inventors of VIPERS are now moving subtly to the - as if they would never doing anything unfortunate - to the position where they say, ‘Oh no we're just asking children to do this sort of thing, as an inherent part of engaging with text. We weren't saying that you should teach these as generic skills’. And yet you don't really need to go far back or look at the resources that they produced previously to recognize that, no that's exactly what they were trying to do. So in terms of resources, a very famous, so there's a website called Literacy Shed, which has lots of wonderful stuff and it's done lots of good stuff. But people from that and connected with that pushed quite hard this idea of VIPERS which very much encourage teachers to use their resources which again in some cases, said, like ‘We're learning vocabulary on Monday; We’re learning inferences on Tuesday; We're learning how to predict on Wednesday’. So I'm not sure where that quite counts as a resource, but it's very common out there.

Actually alongside that, just to note, someone who used to work for Literacy Shed, again, does lots of good in terms of reading I think in many ways, compared to a lot of what came before this VIPERS stuff probably did more good than harm, because of the way that it transferred a lot of schools towards a whole class reading approach, rather than like a carousel of activities. So it probably did more good than harm. So not criticizing too heavily. But as part of this approach and something that's now rolled out in thousands of schools I imagine, was this kind of set of planning that you could find, which does exactly says, you know ‘Mondays as vocabulary; Tuesdays as inference; Wednesdays as prediction’. And these are the resources that come along with that usually with little extracts of text, particular questions to focus upon, that sort of thing.

Researcher 1: That's really interesting. Thank you. I'm just going to share my screen briefly, if I may. I realized earlier you talked about kind of not wanting to, you know, distinguish particular inference types and go down that kind of nitty gritty approach.

So, here are some kind of sentences or utterances, which might give rise to inferences. And we've talked about some of these before, say like at the bottom, we've talked about coherence inferences, for example. Just take your time and have a look at these if you want, I won’t read them out. And it would just be interesting to know, you know, when you think of your experience of teaching inferences, which are these are ones which you think that would be the kind of thing a teacher might try and get at with a question, as you talked about, and which of these do you think that just wouldn't come in to what we think of as as inferencing.

Teacher 1: Sure. I would say very specifically off the bat that the kind of anaphor resolution - so the understanding of anaphora - is just almost never touched upon; it's not thought about. It will still be taught, but in terms of when people directly try to teach inference as a generic skill, they don't think of anaphors, and understanding how they relate to particular reference; how that is a part of it. They do in practice - they end up having to because they'll read a sentence to the children and they’ll find that they don't understand something key and what they'll find is they're mixing up, you know, what the ‘it’ or the ‘he’ or ‘she’ or ‘they’ is actually referring to, in the case of pronouns - I'm well aware that it isn't just pronouns when it comes to anaphors. But yeah that's something that gets done in practice but it's almost never planned for, is the first thing I'd say.

I think the causal inferences are very common as are kind of your global coherence inferences - this idea of you know, grasping something wider about the text in order to understand something about a specific idea or sentence.

Worth noting that, I think you're well aware of this, they wouldn't be kind of described in this fashion, they wouldn't, we wouldn’t say ‘metonymy’, for example.

Researcher 1: And I should say don’t worry if you’ve never seen these terms yourself either. I just sort of put them for reference.

Teacher 1: One or two are certainly unfamiliar so like relevance implicature...

Researcher 1: Yeah.

Teacher 1: I would say that, beyond anaphors, they are all the sorts of things that are likely to be - I would say kind of the presupposition, this stuff, it's often... I think there are certain cases where teachers will take for granted bits of kind of vocabulary understanding. So you mentioned kind of ‘finished his book’ there, if someone wants to say ‘he watched the film - he ate it up’. I mean obviously this is another kind of metaphorical use for this certain occasions where unless the metaphor is..., (I've got a better way of putting it), where metaphors are kind of like dead metaphors - so ones within the language that, yeah you know what a dead metaphor is, sorry I apologize - metaphors teachers often take for granted that kids are going to recognize this stuff. Whereas with the metaphor like you reference here, this idea of a tree wearing a white hat, that's not something that a teacher is likely to reference - sorry, a teacher is likely to reference this kind of one. But in comparison, where someone says, ‘there was a blanket of snow on the ground’, a teacher can often take for granted the idea that ‘Oh yeah so we're talking about blanket of snow, as in, it's on the ground’. And that will be as far as they go. They don't necessarily dig into the idea of ‘Well, specifically, why a blanket? What do we mean? Is this kind of a sense of protective layer; something almost comforting about it?’. They might not pick it apart to that extent. In short, I think the deader a metaphor is, the more it's become just this cliche of the language, the less likely a teacher is to notice it and pick it apart as a type of inference question in my experience at least. I guess you could make an argument that, in their view of vocabulary skills, generic vocabulary skills, it almost transitions from being inference as far as they're concerned to just vocabulary understanding. The more dead the metaphor is, the more it's just a part of embedded part of vocabulary, when, of course, I wouldn't necessarily quite make that distinction, because I think that, obviously understanding vocabulary is kind of just an essential component of inference.

I'm trying to think if there's any others in that which I would... Could you explain to me... I understand what it means to presuppose something, but in this kind of technical term, when you say presupposition, could you elaborate on that for me?

Researcher 1: If you get, like someone saying or writing ‘He finished his book’ out of the blue, you have to presuppose that he actually started the book.

Teacher 1: I see.

Researcher 1: I mean, this is again, one that is very much probably under the radar and something that to adult speakers seems very obvious.

Teacher 1: I think, as a general rule of thumb, the more obvious it is to adults, the less likely it is to become part of an inference to be considered part of the teaching of inference as a skill. And again that relates to the kind of dead metaphor idea that I suggested and...

Researcher 1: That's the pick up on the implicature one because I guess it's quite similar to the causal inference below actually, this particular one. But I guess the idea would be if you've got someone asking ‘Do want to play football this evening?’, and the person replies, ‘I've got a piano lesson.’, it's actually not a direct answer to the question which would be ‘Yes, I want to play football’ or ‘No, I don't want to. / I can't.’ And they’ve said something that on the very surface of it, is kind of irrelevant to the question. But you can kind of reason along my lines of: 'I think the person will want to give me a relevant answer to the question because they're a cooperative, helpful speaker, and you usually try to say relevant things in a conversation'. And so, on that basis, you can kind of work out using your background knowledge: If they've got a piano lesson, that means they're doing something else that probably means they don’t have time, or you know you can't get muddy before the piano lesson or whatever it is, and you can kind of bring in that background knowledge to work out how the answer is in fact a relevant reply and you understand that, 'no they don't want to play football'.

Teacher 1: I think in a lot of cases...

Researcher 1: That was just again, that's the kind of case where probably an adult would understand that.

Teacher 1: Yeah, again, I agree, I think that's the sort of thing that often will kind of fly under the radar of what needs to be taught because it doesn't feel quite so obvious. Yeah in short the stuff that teachers can kind of spot for themselves - they can spot, that they feel, that they notice that they had to bring some background knowledge to bear - they notice that there's something in the text that isn't directly stated. Let me rephrase that, sorry: the less obvious it is, the less likely it is to be taught, in my experience.

Researcher 1: Yeah and just to be clear I'm not putting these up to suggest that these need to be taught.

Teacher 1: No, no, no, no it's all good then.

Researcher 1: I’m just interested in what is taught, in a descriptive sense.

Teacher 1: Yeah I'd say you know, like the global coherence, the causal inference, the metaphors. Even when they're nice and obvious kind of, metonymy, or examples of... My pronunciation, I apologize. It's one of these words I've only ever read. Is it synecdoche?

Researcher 1: Yes.

Teacher 1: That is a component of, or example of metonymy? Because when it's so nice and obvious, that's coming up, but again it's so often taken for granted. You know if someone says, (I'm trying to think of an example)...You know 'the guy's bought a new engine', and he means a new car - that's kind of something that they consider as vocabulary rather than an inference as such.

Researcher 1: Okay.

Teacher 1: I'm not sure what else to kind of add to that... I'd say causal inferences are also quite common in the teaching of... but because that's quite clearly discernible.

Researcher 1: Great. Thank you. Just a couple more questions kind of from me on inferencing which - I think the next one again... You really said a lot to already indirectly, but I'll just ask it in case there's anything else you want to add, but feel free to say no, which is... Do you feel that learning to make inferences is an important part of learning and also of learning to communicate more generally?

Teacher 1: Yeah it's essential. I think trying to separate inference making from comprehension more generally is... It seems inaccurate; it seems like a false separation to me. I think the inferencing, as we might call it, is such an essential component of creating a mental model of what's going on in the text that to kind of separate it from comprehension as a... rather than important part of it.; it almost is it. Not quite... There are obviously other components to it but it's so central to what's going on. I think that the teaching of it and I mean teaching in the grandest sense, so the experiences that children need to undertake the development of vocabulary, the development of knowledge about the world. All of that stuff, that supports the ability to make inferences is essential to the teaching of reading.

Researcher 1: And do you think there's anything that would help teachers or help the teaching of inference-making? kind of beyond what you've described is already being done at the moment but kind of...

Teacher 1: 100%. Like the key thing that would make I think central difference to read, just to to general reading outcomes, but specifically via a better development of comprehension, would be teachers understanding the importance of exposure to text. I know, sounds like an obvious thing, but so much of what I've described already - and the reason why it feels anathema to me - is that this attempt to teach inference, for example, as one of a set of comprehension skills, often means that much less time in reading lessons and just across school generally is actually spent engaging with text. So, a 30-minute-reading lesson might involve two or three minutes of actually engaging with text and then 27 minutes of writing answers to questions. It's not very common that that happens, to that extreme. But that's between the spectrum of thinking about reading comprehension as primarily the shared engagement with well chosen text, and we're answering inference questions, most teaching in my experiences significantly towards that end of the spectrum. So, in terms of what could make things better: reinforcing and, in some cases, just instilling, because it's just not there, the idea that the teaching of reading comprehension involves rich, varied and wide engagement with text.

Researcher 1: And kind of practically, about that, how would you actually envisage making that change in a school or across many schools?

Teacher 1: Well, at the most practical end of the spectrum, I would say that the changes that I would make is that, where there are schools and there are countless who, when it comes to their teaching of reading, they don't have class sets of books, be they nonfiction books or class sets of poetry or information texts, where teachers are in the position of printing off little extracts - that isn't ideal, and I would advocate that schools, either through the Web... Obviously we're in a position now where budgets are extremely tight and yet in years gone by we've seen huge amounts of investment in things like Ipads and lots of things that are useful, but nowhere near as essential as making sure that when you're teaching reading, all of the children, or at least in pairs, can use the book that you want to teach, so you end up... Because you have this... There’s like this interaction between this particular practicality of not having texts around which you can build your reading instruction, and this, as a result, convenient idea of teaching comprehension skills as generic things where you do a little bit of reading and then lots of question answering. Because if you don't have the books in your school, well, it doesn't matter if you don't have sets of books in your school because you don't need to read lots of text in order to become good at inferencing. You just need to read a little extract and then answer some inference questions related to it -that's what will make you good at inferencing. So on a practical level, first key change is, books in schools; would be a start on the prioritization of a reading a specified reading curriculum that children are going to undertake, because part of that means some advanced planning as a reading coordinator, or as a school leader, in which you say, ‘These are the books we're going to study. We will invest in class sets of them.’

And like I said, there's a bit of advanced planning involved with that. If you just think, ‘Oh, we need texts in our classroom by these these these and these.’ You don't necessarily get the breadth, the variety, the representation that you would get if you intentionally put thought into it. So I'd start with that.

The second thing in terms of practical changes, (I know this might feel a little more theoretical,) but professional development for school leaders in particular reading leaders and school teachers that pushes them beyond this idea, or at least nudges them, I should say, beyond this idea of generic comprehension skills: a better understanding of the theory, I think the quite obvious - I won't say ‘obvious’ because it's the wrong word - but the quite the fairly well accepted ideas of what constitutes reading, would be useful in my experience. Teachers aren’t particularly aware of even the most basic aspects of the research into reading. So, just like the foundational ideas, that we seem to base our understanding of reading around things like - regardless of one's criticisms of components of it - things like simple view of reading. That's just not something that teachers will necessarily be familiar with.

And other practical aspects, and I would say that, alongside these and what ties into them is that teachers ideally need to see modelled what the teaching of reading looks like or can look like in practice and how this can relate to a lower planning burden way of dealing with reading. To think about comprehension skills, yes, you don't need to read anything in advance you've just got this little chunk of text, but you have to organize the questions, you usually have to find them on things like Twinkle or a particular website. Whereas if you're starting to think of the teaching of reading comprehension effectively as ‘We're going to read these 10 pages together’, ‘We're going to stop here here here here and here to discuss particular words or particular ideas or particular metaphors’ depending on what aspect I think this text is most useful for. Modeling that way of planning and that way of teaching, I think, would make a difference in the classroom as well.

Researcher 1: Thank you.

Teacher 1: I’m sure there are other practical things that I can think of. But those are the ones that kind of jump out off the top of my head.

Researcher 1: That's really interesting and I was just thinking of some different kind of ages and stages. Some of those just very much I guess more the kind of key Stage 2 older end. Again, this is a thinking of me, not a teacher thinking... But I’m thinking of... In the younger classrooms, so Reception or Key Stage 1, I'm imagining you do get more whole class reading in terms of being read to. So, how do you think these kind of ideas, could be applied or linked in there? Is that already happening more in the early years classroom because you have this whole class reading or not because you are concentrating on phonics or... That's a big complex question.

Teacher 1: Oh, it is. Generally, I would say, there has been a move towards Key Stage 2 aligning with Key Stage 1 more in its prioritization of reading aloud to children, which I think is fantastic. It's certainly the case that, in Key Stage 1 and Reception there's always been this central view that we read to children as part of the development of their language comprehension, part of their development of their understanding how texts work and vocabulary; of the idea that we do make meaning from text.

Alongside that, I would say that in kind of Reception, Key Stage 1... And to some extent in Key Stage 2, but it does kind of fade away a little bit as well I'm afraid, there is this understanding that developing children's listening and speaking comprehension - so just their general usage of spoken language - is fundamental to long term, literacy outcomes, and so that is part of it. So it might be the case that, even if we're teaching a little bit of something that might be defined as science or mathematics or whatever it might be, in Reception and Key Stage 1, though increasingly in Key Stage 2 as well, there is this understanding that by supporting children to speak and listen in a way that is giving them lots of opportunities to articulate their ideas clearly, to clarify their ideas, to have their ideas questioned and praised and supported - that all of that stuff contributes to reading. I think we've generally done a better job of that in Reception, Key Stage 1. I think the schools that work best do that also in Key Stage 2.

I think, to note as well, the practicalities of teaching reading in Reception, Year 1, to a lesser extent, Year 2, but especially those first two classes, is that you have the majority of the class, that you can't necessarily or very easily pick up a text and say, ‘This is a nice text. Let's all have a class copy of it. Let's read it aloud together and then kind of discuss the meaning of it’. You can do that quite well with books that are designed to match the the aspects of decoding that they've already learned, so decodable books can be useful for this, in particular. But, generally speaking, I would say that, beyond that kind of engagement with decodable texts, most of what we think of is reading instruction in Reception and Year 1 is the development of spoken language capabilities, including reading aloud to children, discussing books with children, just discussing ideas with children.

And alongside that, alongside whatever bit of phonics is done through that day - when I say language comprehension as well, of course, this might include things like songs and nursery rhymes. It's a complex beast and it isn't as simple as helping children to speak and listen better.

Researcher 1: Yeah, of course, thank you. Is there anything you want to ask me or anything else you feel you want to add?

Teacher 1: No, I think, as far as I hope, anything that I've said has been vaguely helpful. I'm sure there were bits and pieces that I've missed out that I've not addressed as well as I might have done, but generally speaking, I hope what I’ve said has been vaguely useful.

Researcher 1: It really has been very interesting, from my point of view and yeah really useful. Do you have five minutes so I can ask you one or two of the play-based questions?

Teacher 1: Of course. One thing on the previous subject that I just realised I haven’t really addressed is the idea that, as part of or as an essential component of developing children's ability to comprehend, and with it and inference as a part of that, we need to think quite carefully about the way that our the rest of our curriculum works. So it might seem like a mundane thing, but when you are putting together a history curriculum or science curriculum or geography curriculum, essentially what you're doing is prioritizing particular knowledge, skills and experiences that you want children to have, because, you know, there's an infinite array of what you could teach and you've got to select something. So there's a sense of prioritization. And part of that is thinking about, what stuff is most valuable for children to know, because it's just that much more common. Like an obvious example of this would be thinking about the importance of higher order concepts. So, for example, if a child leave school not knowing what koala is, it's not ideal, but we can live with it. For child leave school not knowing what a mammal is, you've dropped the ball. If a child leave school not knowing what a living thing is, you've just failed completely. So, generally speaking, while we exemplify these higher order concepts with these lower order concepts, it is making sure that children leave school with these particularly valuable higher order concepts and particularly common exemplifications of those, that allows us to construct a curriculum in such a way that we hope children would better equipped to comprehend from text.

Again so, I don't mind if a child doesn't remember from my curriculum, the capital of Peru, I do mind if they don't know that South America exists. You know, or what the word 'South America' refers to, because the concept of a continent and the concept of South America is likely to give them a sense of... is more likely to contribute to their understanding of text over the longer term, more than the understanding of the specific GDP of Lima in Peru. So there's in a sense, when we're thinking about the prioritization that we that we... that's part of curriculum development, in the back of our minds, we need to be thinking that doing this well contributes to reading comprehension through a more secure development of background knowledge. And the way that we organize stuff in that curriculum can support their understanding as well. So curriculum development has to be part of the conversation when we're talking about improving reading outcomes.

Sorry bit of an aside there it just feels like a real knotty thing, and at the heart of how we get children to be better readers. Because the hard bit is how do we get them to know more about words, texts in the wider world. That's a really tricky thing to do and curriculum development is a big part of that.

Researcher 1: We've talked a little bit about how speech and listening comprehension all kind of feed in and support reading as well. And in your experience or, again, yet what you've seen, is narrative or is storytelling something that is explicitly taught or kind of encouraged in the classroom?

Teacher 1: I mean across across the phases, absolutely story, mapping our stories, the underlying patterns behind certain types of stories, this is central to the way to... It tends to be taught through writing more than reading, but obviously these two things connected. And I'd say, in particular, I mean thinking about Key Stage 2, you're likely to teach it as in ‘We're going to be doing this piece of writing’ or ‘We want to understand this story. Let's talk about narrative explicitly’. Further down the school you go I think more complex and interesting this teaching gets, so what right down in Reception, the teaching of things like role play. Or I say 'teaching': teaching again in it's broadest sense, the encouragement and the guidance support, and knowing when to just stand back, so that role play takes place. And so often this relates to the narratives that you've been teaching through story time. So, yes, it's absolutely something that is taught across the board and say it's again it's more tightly linked to an outcome of some kind, the further you get up at the school; the lower down you're getting the school, there is often this joyous interweaving between the teaching of story and thinking about kinds of questions that are coming; the kind of play, the kind of free choice aspects of learning that are absolutely key in Reception. And on a personal level, I think, are also key where schools choose to do them - and I think they should - in parts of Key Stage 1 as well.

Researcher 1: And yes, I’m picking up on that. And how I guess is much more general but where do you think the balance is or how often do you get child-led activities versus kind of direct teaching? I guess that's the kind of thing that, as you said, changes as you go up in the school. Maybe particularly think about Reception and then Year 1.

Teacher 1: I would say that it varies wildly regardless of the phase. I think there are certain schools that include lots of role play and drama into their teaching of writing in particular. As you go further up the school, generally speaking, in terms if we're talking like kind of crude percentages, it's very rare. Even in the schools that do you feel do quite a lot of it, it's likely to be you know 10 or 20 minutes a day of kind of role play, drama, this kind of free choice of how are we going to express these ideas.

And then obviously how we define play becomes a bit of a challenge here. Because one might say, ‘Oh we're doing a piece of writing and this is this idea, and I wonder which way you're going to take it and leaving certain options on the table’. So the children go, ‘Oh I'm going to do this; I'm gonna do this’. You can make an argument that is a more playful way to deal with that particular learning task than someone who says, ‘Okay I'm going to structure this story, beginning, middle, end. Going to write this this and this. Off you go’. So, in some ways, I think, particularly as you get further at school, the idea of where choice and play begins and where a complete lack of autonomy ends at the other end of the spectrum is more of a continuum rather than completely on or off. That said, I think the distinction between those two, in many ways, becomes clearer the further down the school you get. So in Reception, there will be perhaps a timetable. I'd say a common timetable that lots of schools will work to, but it does vary massively, will involve children spending, maybe a third to a half of their day with a teacher, either at a table being guided towards doing certain things, and this is often towards the end of Reception as well, because there might be a transition. But I'd say that, even with that transition, the vast majority of Reception classrooms spend the majority of their time allowing children a sense of choice around what they do, in an environment that seeks to support them in their learning. It’s a good rule of thumb. But if someone said, ‘Where's the median school set for this?’. And say that the median schools will have children undertaking what they usually call like 'continuous provision' for 60 to 70% of the day. Again I'm not an expert in Reception. I've done a bit of Reception teaching. I've seen Reception classrooms in a few schools, but it's a rough rule of thumb.

**Teacher 2**

Researcher 1: Great! So to start off... The national curriculum for Key Stage 1 which I think is kind of you know your area.

Teacher 2: No. I’m early years.

Researcher 1: Early years, okay.

Teacher 2: I mean we move around a lot. Last year I was Year 3, Year 5, and now I'm reception.

Researcher 1: Reception. Okay, so, for Key Stage 1 and certainly for Key Stage 2, I’m actually not sure about earlier... It says that pupils should be taught to understand the books that they read, and they listen to you by making inferences on the basis of what’s said and done. What kind of inferences do you understand this to be talking about?

Teacher 2: We would be talking about, probably at the simplistic level, what they think might happen next. And so often we would stop a story near the end, and can they have they followed it through: can they think what might happen next? I mean not necessarily right at the end, but you know the next page, for little children. We'd be thinking about character; we would be thinking about key things within a book. And in my setting we usually discuss the vocabulary that they're going to meet beforehand, so that - we have a wide range of children in terms of background and first language - so we would perhaps go through some keywords. You might get in a fairy tale or something that just isn't common vocabulary like ‘wood cutter’ in *Little Red Riding Hood* or something like that, you know. Most children wouldn't know what is nowadays. So we perhaps go through that to help children to understand and infer more from the story. We would look at all sorts of picture clues and think about what a picture could tell us in terms of time of day, or the character, outward appearance or emotions. Yeah, I mean inference it’s everything, isn't it? Everything you're doing when you're reading a book apart from actually decoding the words.

Researcher 1: How do you incorporate teaching this inference making into your teaching? What's your experience with that?

Teacher 2: In my setting, we have a comprehension, kind of like layout for the week. So we would look at vocabulary one day, character another day. We'll look at inference one day... There are five of them and I can't remember the last two, as I haven't done them this year. So we would have a specific timetabled lesson on inference every week, and that's apart from more the incidental things that you do in your teaching, working with children. So yeah, we have a program at school now... our comprehension at school... reading for reading and reading for meaning. Am I rambling? Sorry.

Researcher 1: No this is absolutely... about your experience.

Teacher 2: I’m thinking about out of reception now, across the school. We teach reading for reading where children are learning to read the words with intonation and understanding punctuation. And then we teach reading for meaning, which is all the inference, the character, the vocabulary, the nitty gritty comprehension of what they've actually read. And we do the two things every single day, but there is one particular day where we concentrate on the inference.

Researcher 1: Would you be using the same text throughout the week and doing those different aspects?

Teacher 2: Sometimes, not always. Sometimes, if the children are more able, we might take two texts that are similar, so you can have some practice at the beginning of the week and then we're trying to do some more independent might later on in the week. With children in the less able classes, we might kind of slog away with the same text for four days. Oh that's right: I do remember, on the fifth day they have another similar text and they apply all the four skills they've learned independently.

Researcher 1: I see. And what about in the Early Years classes - in Reception?

Teacher 2: In the early years we have a similar thing, but we have an extra (we've just brought it in this year), and this is partly in response to the pandemic lock down: The children, we are finding, are really, really poor at vocabulary speaking and inference. So actually we brought in, and we shortened their lunchtime, so they have a story at lunchtime every single day. We will be looking at the same sort of things: key vocabulary, character inference skills, and we do that every lunchtime. That's an additional thing.

And then inference skills in the week in Early Years... I guess it is not quite so timetabled. I mean I think it's maybe just something we do all the time. Because all the time as you're teaching, you might be sharing the book or story or video or anything, but you're always be checking the children are understanding and you know... Are they getting the most from the text, the video, or the song, whatever? Are they understanding what the words mean, what's happening? So it's a more subtle approach. It’s less of a rigid...

I mean when I was looking at... This I just think ahead over the weekend, what you're talking about. Yeah we don't actually think about teaching inference as a timetabled thing in Reception, but it happens all the time.

Researcher 1: So, for example, taking that story time you have at lunch times, I imagine that's reading a story aloud to the class. And say what kinds of methods or techniques would you be using to to get the class thinking and making inferences?

Teacher 2: I mean, I have to say I'm a bit of an older teacher. I like a book. The younger teachers they'll always get it up as a YouTube book on a clip, which I'm not so keen on actually. I like the real book. I like the turn page, you know, what you’re going to see on the next page. And what you think might happen to this character and... We do a lot of... Oh, I like to particular do a lot of joining in: if there's a refrain or some things, that being you learn a lot if you can partake in the spoken language of a book. We fairly recently did *Jack and the Beanstalk*. So it’s got the ‘Fee-Fi-Fo-Fum’... Once they're actually saying that out loud, you kind of get into the role with being, yeah this is... There is inference just in joining in. Do you know what I mean? So you try and get children to join. I mean even trying to get children that young to sit and listen to the whole book is really quite hard, for our catchment area.

And again we would use maybe a couple of books, or we might use *The Gruffalo* one day or two days, maybe, and then *The Gruffalo’s Child* for two days, so they've got some continuation of idea of character or setting or author. Just saying that we usually do a book over two days, so even if we finished all on one day, we like to read it again the second day, because it is really nice for little children to come back with the knowledge of the book. They're never bored of it, even if they've heard the story lots and lots of times... Sort of classic stories... Because they can join in more and they understand more, so repetition is fantastic yeah.

Researcher 1: And it sounds like, (just to check that I’ve understood what the main kind of techniques you be using)... It would just be kind of questioning, as you read through, so you... that he stopped at the end of the page and say, ‘What do you think it’s going to happen next? What was the character feeling?’ or ‘Why did that happen?’, something like that.

Teacher 2: Yeah I should have said that. Yeah we have a set of key questions. So we have devised, (well, not myself personally), but the English lead, she has devised a set of... We have a set of about 12 questions: Some of them are very seemingly obvious. But you'd be surprised actually sometimes children without book knowledge from home find even the simplest ones really tricky - building up to much more complex questions. So yeah we do have a set of key questions that we use. But generally you know they fit into those ‘Who’, ‘What’, ‘Why’, ‘Where’.

Researcher 1: And would you also... do you also sort of modeling of that as you read through the book? Kind of modeling your answers or modeling thinking practice or not so much.

Teacher 2: We do something else called ‘Conversation Station’. Have you heard of that before?

Researcher 1: No, I haven’t.

Teacher 2: Conversation Station again this is... But we ability group our children. So I'm in the weakest group at the moment. And what we have found, (and again it is partly the result lockdown), some of our four and five year-olds were never in nursery, have never been to play group. So I have one boy in my class: he is the eldest of three children. And he before he started in September, he'd never been to playgroup, he’d never been to a nursery, they’d never been to a public library. So his only experience of the world was in their flat with mum, dad and the other two siblings. So he basically doesn't speak and that's not an uncommon result of the Covid pandemic.

So we do something called ‘Conversation Station’ where basically we fling up onto the board, the interactive board, a very stimulating picture. And we have Who, What, Why, When, How, those questions as little speech bubble questions. And the children, in theory, this is that they’re supposed to, talk about what they can see or infer. You know, so it's an interesting picture. The weakest children just point to things and say single words, and the more able children can put things together in sentences, and the really more able children can make all sorts of inferences about the picture. But with the weakest children, I will be modeling that for them, because they find it really difficult.

They might see obvious things like... So, for instance, last week we were doing a little project on bridges. So I had a picture of a really rickety string bridge going across the sort of gorge, you know. And that was one picture. The other picture was Tower Bridge all lit up. So we talked about the two bridges and most children they couldn't say, ‘I wouldn't walk across the bridge because it's looks too flimsy’. But that was the inference I really kind of wanted them to make - that link that they were saying things like ‘It's made of string’, ‘It’s high’, ‘It's thin’... And I was wanting to push them to do more, ‘But how does it make you feel’, that sort of thing. So that's something called ‘Conversation Station’ which we should be doing the class, which again is a way of getting children to take a picture and use that for some comprehension-based work.

And we do that actually throughout the school using something called Pobble 365. Have you heard about?

Researcher 1: No.

Teacher 2: Pobble 365 is amazing. So it's a free resource for teachers. And every day, you can get a really fascinating photograph. And it’s just there to stimulate the children. They actually do a whole package of sentence stem questions, vocabulary questions, beginnings of stories and things like that. Yeah look up after this, Pobble 365. Really amazing pictures, you know. Topsy-turvy lands and pictures where children are giants... It's very interesting.

Researcher 1: Thank you. That's all really interesting and great to hear concrete kind of examples as well. I'm going to share my screen now.

Here there are some quite out-of-the-blue sentences, from which you can make inferences or you might need to make inferences to understand them. And don't worry too much about the kind of labels I've given them in green. That's just sort of labels a linguist might give, but it doesn't really matter. What I'm interested in is how many of these would be things you as a teacher would think, ‘Aha! Here is something I'd have to highlight to the children. I'd have to be aware of this in teaching a text’. And then, a more kind of under the radar, you wouldn't think of this as something to be taught. So I'm happy to kind of read through them if you want. Or I can just let you read through them yourself and kind of comment on any you find interesting.

Teacher 2: Well the first one, I can imagine, in Key Stage 1, the children would just think that's very funny. You know the tree... And I don't think most of them would imagine you know, like a snow tipped tree. They just think the tree was wearing a white hat. They'd be very concrete in their understanding of that. They wouldn't understand that was a metaphor at all or any image for them.

And ‘Pick up the big blue cup’, for that I don't think I would say anything about that. I think it would just happen.

‘ “Do you want to play football this evening?” “I’ve got a piano lesson.”’ I don't know about that one. I think you'd probably have to model it. You would have to model that to the children in one of those comprehension lessons and then later in the week see if they could do that on their own, see if there's a link there between those ideas. Is that going to change the outcome for ‘Do you want to play football this evening?’. So I think we'd model that one.

‘He finished his book’. I think the children would just take that; probably most of us would just take that as a reading book, but he could have been writing it, so I think that would slip under the radar.

‘The fire alarm went off today. It was the blue classroom again.’

Researcher 1: The inference there is that...

Teacher 2: We have it happened in the blue.

Researcher 1: It was something in the blue classroom: it was the people in the blue classroom, rather than the blue classrom per se... There might be that particularly subtle version, I think.

Teacher 2: I think they would understand that. I think that wouldn't need explaining because all of our classes are named. So like I'm the Geese class, so I would say things like it was the Geese class and they would understand that; they would know it's the children.

Researcher 1: yeah. Again, something here is that you're using a thing to talk about either an event or people. So like a great example of this is when we talk about, you know, ‘Finland wants to join NATO’ ... It's not actually Finland, it’s the government. Or ‘The White House has said’... It’s not the Whitehouse, it’s the President.

Teacher 2: I don’t know. I think it's difficult there because you're talking actually about... I don't know. I'm not sure about that one. I think children, perhaps wouldn't understand that as well as we'd hoped, unless it was modeled to them or explained to them. Not sure.

‘John gave Jack a book because he thought he’d like it.’ I think that might be the sort of question that children will be asked to think through you know: Was it Jack or was it John who would’ve liked the book. So again, I think that will be more of a discussion point.

‘John gave jack a book. He though he liked it.’ I don't know. I think the children would understand that.

Researcher 1: You wouldn’t pick it up as something...

Teacher 2: Yeah.

Researcher 1: What's the connection between these two sentences?

Teacher 2: I think they probably would have been... I think they would understand it and understand the connection.

[Final example]

Researcher 1: So is this like whether you have might pick up: Something like where are they, what's the context?

Teacher 2: That would be quite hard for a lot of our children, because a lot of the children have never been to the beach. So there's some understanding there that a lot of them wouldn’t have.

Researcher 1: So is that something you would pick up and make a point of it?

Teacher 2: Yes.

Teacher 2: Yes, I think we will definitely talk about that and talk about where we would find salt spray. Yes, because a lot of children wouldn’t know that.

Researcher 1: Great, any other comments in terms of... Yeah which of these you feel things you often bring up in teaching and which are ones that you just leave or anything like that?

Teacher 2: I mean the children they have to know what a metaphor is and a simile; that would come up very early on actually. So that would come up in a taught lesson for that top one. And imagery - I mean I'm always asking my children to try to imagine what we're reading. But they will find it hard, because that they have life-limiting experiences so they don't have a lot of experiences that you and I might have had. I mean, this is the problem we have all the time with comprehension at school: is that children, where they can decode really well, and I don't know whether this would feed into your your interests or not - we actually teach decoding so well that they can read much higher than they can understand. Does that make sense? So children learn to read really quickly at our school, and probably in other schools as well, but their comprehension of what they have read is usually at least a year, if not two years behind their reading age. And for the less able children is a lot further behind, because they can decode, they can read, but they're not understanding their texts.

Researcher 1: Okay, thank you just a couple of final questions. I think you should have answered this one already, but I just say in case if you want to add anything. If you don't that’s fine. So do you feel that making inferences is an important or an unimportant part of learning to read and communicating more generally?

Teacher 2: Oh yeah, no, really important, really important, yeah. Has to be, yeah.

Researcher 1: And is there anything you would feel will help with teaching inference making? For example, kind of questions that you have or support that you think would be useful for you know you or a school in general.

Teacher 2: I mean a lot of it is practice. And we have a reading record at our school which we're a bit ‘reading police’ at our school and the children have to read every night, seven nights a week, at the weekends and the parents have to sign. And in that we include the sort of questions the parents could be asking the kids. But we find certainly after Reception... And we have graded questions, according to the type of book they might be reading. So it might say, like Purple is our lowest level book, and there will be five questions for Purple and it goes all the way through the schemes and stuff. And, but we find that after Reception parents don't actually ask their kids any questions. So children are pretty much left on their own and their school experience to learn how to make inference. So, I suppose, what I'm saying is actually so much depends on the parenting, because there's only so much you can do in school and, we've got over 30 different languages that are school, so children are coming with so many different experiences and limitations on their English spoken language. We do what we can, but it's not ever going to be enough unless the parents are involved, because children just won’t learn those nuances, those inferences. It won’t be part of their experience. So unless we had longer school, more adults in the classroom all those usual things, I don't know what else we could do. We have we have some concrete items. We have puppets and little wooden things, we’ve even got one or two of the Yellow Door stuff […..anonymised personal reference] - we've got some little fairy tale things, which are great for making things really concrete. But yeah I don't know. I mean we have our own comprehension questions which we try and use. We have sort of sentence stem questions that we use throughout the schools, so children get used to those sort of questions. We have our daily comprehension lessons. We do tons, but at the end of the day, it comes to experience and how you've been taught to read a thing. Sadly.

Researcher 1: Yeah that background knowledge and the way that supports.

Teacher 2: Interest and an interest in a book. We also do another thing I don't know if it's of any interest called ‘Renaissance Place Comprehension’, if you’ve heard about[[1]](#footnote-1).

Researcher 1: Don’t think so.

Teacher 2: So, all our books at school are linked to this software called Renaissance Place UK, I think. So that when a child has read a book, they can then do a short online comprehension on the IPads on that book, which is really good. And the questions are in line with what we teach at school, so they’re sort of concrete questions and inference questions and vocabulary questions. I will say this, but the issue is the children just want to get a high score, because points mean prizes. And the higher your score, you gain prizes basically, is their whole reward system based on this software. So there isn't a love of reading, I don't think, generated by this. It's a race to get through as many books as you can. And if you're racing to get through books and score highly in the comprehension, you'll not necessarily get as much from the book. So we don't use that in Reception. It starts in Year 2 as it's quite costly for the school. But we have that as an almost probably the test, or we call it quizzing, they quiz every second or third day: so they have to have a book for two days - so they read it once, read it a second timea, and on third day they quiz. And there are inference questions there in that quiz but the children they just race though because they want to get to high school.

So the tool is not used to its best capacity I think.

Researcher 1: Thank you very much it's been really fascinating to me. As I say, like we just hear your experiences, and, you know, we're not teachers. This is very new to us, but we want to hear how...

Teacher 2: It is hard to teach inference. I suppose… probably as soon as I come off this call, I’ll think about different ways to do it. Yeah but it comes into so much. It comes to everything because... and again definitely since the pandemic, children's experiences and their depth of knowledge about things is so weak. And they're going to miss out on so much, unless we kind of draw as much as we can from a text or draw as much as we can from a video or an image. And I guess we're modeling it all the time. That's what it comes down to I guess yeah.

Researcher 1: I'll hand over to [Researcher 2].

Researcher 2: First of all, before I get into the proper part of my questions, I just wanted to follow up on something you said. You mentioned if I'm not mistaken, that metaphor is taught, is kind of directly taught. I was wondering if you could tell me what class that is done in, what ages and maybe a bit of information about that

J: (unintelligible) grammar (unintelligible)

Researcher 2: I meant more which ages…how do you say it here…which year?

Teacher 2: yeah you’ll have to Google that yourself I can't remember. They’re all, they’re all… Grammar, metaphor, simile, alliteration onomatopoeia, that all comes into grammar, (?) clause, adverbial and they're all year based so…and because i'm not in… if I was in the year group I’d remember straight away…year four was frontal adverbial I think…sorry year three…so they come in different year groups… and metaphor, simile, imagery…it might be a five by can't remember yeah.

Researcher 2: Okay, thank you. So this is not something that you've personally taught…

Teacher 2: No it’s the government's decided yeah…

Researcher 2: Oh no I meant… this is not something that you have experienced teaching.

Teacher 2: yeah I’ve taught them yeah.

Researcher 2: Oh, do you have any examples of how metaphors or simile specifically would be taught, is it just…

Teacher 2: um…we’d use pictures, we'd have the children, if they were talking about being (?) if they were melting we’d have them running on the spot, you know, and and experiencing something ,and we use good examples from books all the time and try to find the best example to show them and we talk about it, you know they might be drawing their own and yeah so yeah many different ways yeah.

Researcher 2: Okay, so you mentioned, you mentioned storytelling in cases where you will be reading a book to the children and then ask questions, so in that kind of…narrative comprehension for them. Do you have any teaching of narrative production for them, for example, where they would have to tell a story, act out a story with storyboards, something like that? (she nods) Yes?

Teacher 2: Yeah. From any age group or from where I am at the moment?

Researcher 2: Um, I'm looking more at younger children, but anything is obviously valuable.

Teacher 2: Okay, so last week, so I'm in reception, so last week we looked at the three billy goats gruff story, so we read it in a couple of different slightly different formats and we acted it out, we have a little stage at school outside so we we know we're trip trapping across the stage and pretending to be the different characters, we made puppets, we built…well they painted and made a 3D settings for the the story, they made the whole puppets on lolly sticks, and we also use something called puppet pals, which is an app on the iPad which is amazing, [anonymised personal comment], puppet pals, so you can import, it comes with the… different puppets and different settings and you can basically with your fingers get a setting, move your puppets around and you do the voiceover and record yourself telling the story. So, even in reception, they can do that, they absolutely love it…so they’re retelling the narrative and of course they put in all their own funny little words and things, um, and of the early learning goals is to retell a narrative using original vocabulary and to retell a narrative using self-generated vocabulary and then, and then actually on the Friday, on the day that I teach them, we were trying to get them to write their own little version, um, and I had cutouts for them to choose, so like an elf or a fairy or a king, or dragon, “who would you like to have on the bridge” and “who's going to travel across the bridge”, but they actually…that was a step too far for them, they couldn't do it, they…I thought they'd be able to imagine a different creature going across the bridge and they found it really hard and it might have been because it was just so ingrained in them from the first four days, it was a goat that they couldn't do it. But that's a leap, that's a whole leap of understanding another animal, how it might move, what it might be going over the bridge to get, so it's quite…it was quite a big ask, I was hoping they could do it but they found it really hard.

Researcher 2: Okay. That’s very interesting, so within these stories, so going back to the examples of language that [Researcher 1] was presenting, really the two that I'm kind of looking at is what was labeled as reference, so it was something like “the big blue bowl” or something, um… Here, generally, that being in a context where there's multiple bowls, maybe a small blue one and red one and a big blue one and… Children…um…Obviously, if you want the big blue bowl all of those adjectives are necessary to disambiguate between those three, so that's something that I'm looking at…and then also, I mean more generally the ability to describe something or maybe a character or an item or something, giving…using adjectives, giving sufficient information, and then, on the other hand, um, I think it was called anaphora resolution…well…or generally just the use of…using I guess pronouns… this would be the production side more, of using pronouns correctly in a story, if you introduced some characters and then the ability to then use pronouns and then refer back to them as they’re reintroduced in the story… So, within kind of narrative production, are these at all things that you would think about in terms of describing characters, and is that something you would teach or...

Teacher 2: yeah we would. We would have to think about it, partly because a lot of children English isn't their first language, and pronouns are very different in different languages, like Hungarian doesn't have pronouns, and so we…yeah children really do muddle up he and she and his and hers all the time actually, um, so yeah we would model that and possibly over emphasize it sometimes um, wouldn't correct a child, but if they said, with a princess and he was in the palace, you know you’d repeat back “she, she wasn't the palace wasn’t she”. So yes, so they…younger children, particularly muddle… and children with English as an additional language, even more so muddle… yeah we'd have to check for things like big medium and small, probably they wouldn't know medium, so you would do that may be in a shape, space and measure lesson. If you were doing like goldilocks and the three bears you would maybe go through all that vocabulary as a more of a practical thing, lining up balls, which is the big one, which is the small one, “this one in the middle, is the medium one” and talking about the language there, um…yeah so we would we would teach specific language, we would check pronouns…adjectives yeah I mean the more able writers and speakers at school are always better with adjectives, you know, because, and this is something we find in their emotional literacy as well, they're either happy or sad, but a child who knows whether they're anxious, worried, tired, fed up, you know, if they can explain it better, they just got a richer vocabulary and better understanding of so much more…so yeah we would always be trying to expand their adjective base but usually it's pretty weak in reception.

Researcher 2: Okay. I’m currently working on potentially developing techniques to encourage children to use adjectives or to to pick up on disambiguating features on characters, so for example if you have multiple animals with multiple hats in various colors, animals in different sizes, etc, and teaching them to be able to describe uniquely one of these…Is that something that you think is relevant to the learning in kind of reception age, is that something that you would find interesting.

Teacher 2: Oh yeah yeah definitely yeah definitely yeah.

Researcher 2: And then, so looking more into play… from what I can hear it seems that there is…do you see play in the younger years as a tool for learning or do you tend to have…to separate times of play and times of kind of `’teaching`’?

Teacher 2: We are quite a formal school. So, because we have so much catch up to do with the children, so we are more formal our setting than other reception classes, but our whole week will be based around a theme and all the outside learning activities, the children would see as play, but they would all be linked to, to backup anything that was from a formerly taught a lesson. So again for the three billy goats gruff, that’s the last one we just did, in the water we had… in the water area outside we'd have all the things to make bridges, we’d have the stage with all the costumes and puppets to retell the story, we had gross motor things where children could be walking across planks and bridges so again, yes, all the play type things would be planned to match the formal type lessons, yeah.

Researcher 2: Then I guess…

Teacher 2: Not that the children, not that the children would notice that always, which… and that that is a huge disappointment, sometimes, because what you want is for them to be walking across the big…you know the gross motor things for balance whatever and thinking “oh I'm, just like the goats”, you know, trip trap, but that doesn't always happen, but the experiential play stuff is there for them and we're trying to encourage it, but it's not always there, yeah, they don't always see it.

Researcher 2: And would you say that you sometimes would… in those times of play is the aim to let them play freely and see if any of the things, you know…or for example, are you hoping that they'll realize it for themselves or would you say that there's some amount of scaffolding, and the teachers providing guidance to maybe suggest these learning goals to them.

Teacher 2: Um, yeah that there will be some suggesting, but for good levels of development, it has to be child initiated. So if we want to capture anything as possibly showing that they've reached one of the goals it has to be child initiated, so we scaffold it all through the year, different things, and hopefully we're seeing some of that now, but it's hard.

Researcher 2: In terms of time that is spent in the classroom, what proportion, would you say would be just you speaking… so you mentioned formal, does that mean mostly you teaching and the children listening, or what proportion is the child…

Teacher 2: Um, probably, so, we go in sort of forty minutes slots, I guess, several of them during the day, and maybe, um, it’s hard to say actually, but usually there will be sort of 10 minutes,10 to 15 minutes, maybe, on the, you know, carpet session where you'll be talking to the children, they might be joining in with things, um, we do a lot of “my turn your turn" so they might be repeating or joining in and then…yes, so 10/15 minutes of that, and then the rest of that 40 minutes would be some activity where they will be working in twos or threes or small groups doing follow up using the learning from that introduction, does that make sense? And then there will be other sessions, where it is literally independent learning, we call it independent learning, where they can choose where they want to go.

Researcher 2: Okay, so just to kind of make sure that I'm understanding this correctly so…if I understand correctly, you were describing most of the actual classroom time as formal in this sense of not necessarily playful, but the child is very much still active during that time. Is that correct?

Teacher 2: Yeah.

Researcher 2: As opposed to just listening to a lesson.

Teacher 2: Yes, yeah so we have…we are quite formal at our school, so compared to other receptions where there'd be a lot more open ended play… but those children generally would come from backgrounds and families where they know how to make the most of the play that's offered to them, you know.

Researcher 2: Okay.

Teacher 2: So we have to guide a lot at our school yeah.

Researcher 2: So informal… oh, that’s very interesting! So your definition of formal versus informal being the amount of adult input, as opposed to free play and letting the children just explore, is that…?

Teacher 2: Um, I’m not quite sure. I mean we have… we don't call it, we don't call it… we have break time and the rest of the times when there is less formal we call that independent learning, and the children… we would have set up activities inside and outside, and…we have three reception classes, we would have set up activities with the hope that they would come and join one of the adults there, or come and join in with the resources there and have a go but we don't make them, but nothing is…we don't just leave everything out and let them just do whatever they want, we have to sort of tailor it I suppose, to get the most from it. But in other settings there wouldn't be that tailoring it would just be like “open the doors" and children could do whatever they want.

Researcher 2: Okay. That's very interesting…and in the child activities within the classroom time do you think that they’re…that it could be potentially useful to have activities that seem play-like but that are directly designed for teaching. So say, for example, something based on…what i'm looking at currently…something based on a guessing game, maybe, or something with a specific…a specific game, but an educational game of sorts I guess… that is very much designed for learning and scaffolded by the adult, but has potentially that added motivation of play… is that something you would ever employ in your teaching?

Teacher 2: Yeah, and we have games like that, but I have to tell you, children will make their own game of it, or whatever, and they won’t necessarily follow the rules. And you think it's so obvious, surely you understand, you know, what I'm hoping for here, but unless there's an adult there that's not necessarily going to happen, yeah. I mean you know, and that is good, and I think experience has taught me that actually sometimes that's really beneficial anyway, for the children, you know, but it can be disappointing and, you know, it is a bit disappointing sometimes, you think you've laid out something or a game you've put out and you think that's really lovely, and you know, surely they're going to learn something from that lady bird domino set and all they do is decide to hide them under the mat because that's quite fun.

Researcher 2: So, so I guess in these kind of cases the role of the adult is very much essential.

Teacher 2: yeah yeah.

Researcher 2: As a personal…how many children do you have in your classroom, on average, just as a…

Teacher 2: Well, so we group according to ability, so I'm in the less able class, so we have fifteen, and the more able class has 26, and the one in the middle, has 21 I think yeah.

Researcher 2: Okay, so that is quite a few children, I guess, for these kind of activities but are you…

Teacher 2: Well no those are small size classes, because yeah so you have 30 usually so we just got a low intake this year.

Researcher 2: Okay yeah that's fine with me. This was very, very interesting, thank you very much for speaking with us.

Teacher 2: That’s alright!

Researcher 2: [Researcher 1], I’ll let you wrap up.

Researcher 1: Did you have anything, kind of last question you wanted to add?

Researcher 2: No, I think that was it.

Researcher 1: Great! Well do you have any questions for us ?

Teacher 2: Gosh, I don’t know…

Researcher 1: You don’t have to, I just want to give that opportunity.

Teacher 2: yeah I don’t think so, I mean…You know, I don't agree with what the government says, you know… we need TAs in school because they are the people to be honest, who can sit with a group of five children and make a game worthwhile, you know and the government just wants to get rid of TAs and, you know, you won’t be wanting your [children] in a class of 30 kids and one adult because their experience will just be limited and all of these things that we've been talking about, all of the games and the inference and the sharing books can only happen if there's more adult…the ratios of adults to children allow that yeah and… you know the inference skills that you've been talking about, where your interest lies, you know it's so important for growing up. Children need to be able to understand nuances and what people mean to make a better, worthwhile society…so yeah definitely important skills, we need to start on the ground level with having a lot more adult help in school.

Researcher 1: For those sort of communication opportunities, led by adults and yeah…Well, I mean if anything occurs to you you’re obviously very welcome to email me at any point in…

Teacher 2: Thank you! I hope I haven’t missed out something completely major that we do.

Researcher 1: It’s alright. It’s really just…

Teacher 2: We work…we work jolly hard.

Researcher 1: Yeah. it really sounds like it! Yeah, fantastic, well in that case we'll wrap up.

**Teacher 3**

Researcher 1: I just wonder whether you could start off by telling us, you know, without identifiable details, but just a little bit about your school. Like is it a private school or state school or infants or primary... Just very general things about that.

Teacher 3: We’re one of three state schools in [location]. And it’s a two-form entry school. So we've got 30 children in each class, and two Receptions, two Year 1 and two Year 2, that sort of thing. And we also got a nursery with about 45 or 50 children in it, most of which come to our school. But some of them don't live near enough to be in the catchment area to be able to come. So then every year we have about 15 children that join our Reception that haven't been to our nursery, or have been to other nurseries, and that sort of thing. And then a few children from our nursery then have to go off there to other primary schools.

Researcher 1: Thank you. And yes, to dive into the actual content. The Key Stage 1 curriculum, which I know you're not teaching at the moment, but I guess you have in mind: so it says that pupils should be taught to understand both the books they can read and those they listen to by making inferences on the basis of what is said and done. So when you read that or hear that, what kind of inferences do you think it's talking about? And how do you understand that?

Teacher 3: So I think being at Reception, I think we're very mindful of like, the Key Stage 1 curriculum, and thinking, we need to do those things as well. And within Reception curriculum, we've also got like a whole section on comprehension. So it is big for us to understand the stories that children read themselves and that they listen to.

Because of the government’s phonics thing, saying that they shouldn't be reading books that are beyond their phonics ability, we find that in the autumn term, books that they read for themselves don't really have loads of inference in them, because they are only made up of about six or eight sounds probably. And so like actually they... the chances for that... and a bit more tricky. But certainly for the books that we read to them like the how and the why questions, particularly, I think... are huge for us. And start off very basic like, ‘Why do you think the character is wearing a coat today?’, ‘Why might they be doing that?’. And also, I think sort of teach the children that they might be right and they might be wrong, like we don't necessarily always know. So like, if then they go outside and it’s pouring with rain, the answer is reasonably clear. But again, we don't know why. They might have thought it's just a bit cold today or like those kind of things. I guess showing the children that if they can infer things that might be true from a text that probably are true from a text, and that we don't necessarily know. And I guess a bit like that is predictions of what happens afterwards as well, so, what do you think, might happen afterwards?.

As the children's phonics ability then goes on, I read a story with them every day in phonics and phonic scheme sort of suggests a book that we should read every day. And as a class, we always read it, and I try and use that time because the joy of those books is that they are quite simple, so then they do kind of lend themselves to, you know, like a fairly simple story of what happened and why, and we can, yes, so investigate these things I guess together.

Some of the children are very good at that, some children got very good communication skills and understand a lot of those things. For the children they find that more tricky... But I think what's nice is that doing it as a whole class and doing it as individuals with their reading book and with books that we read to them, is nice, because the other children learn those skills from each other, which is nice. So from a whole class text that I might read them and I've read them many times before, because they tend to choose the same ones, like the same sort of questions come up, and the other children sort of learn the answers that go with that I suppose. But with the books that we read every day, like they're different every day and they learn the skills from that so... Yeah and yeah I’m...

Researcher 1: You talked a bit about this already, but is there any other way that you incorporate inference making into your teaching. What's your experience of that in the classroom?

Teacher 3: I think we do quite a lot all the time. I think a big thing for our Early Years - the thing with Early Years is that you can almost choose to do whatever you want to do, as long as you get the children to the end goal. For us, I think, we thought our big thing needs to be communication: the children in our school come in with reasonably low communication skills. And particularly during Covid, they’ve really struggled with communication skills. And hopefully the big thing that anybody that comes in would notice, is that we do quite a lot of that. We’ve also got quite a lot of special needs children, lots of children that are non verbal, for a variety of reasons. So like a whole communication approach is what we go for. So we do quite a lot of Makaton signing and that kind of thing as well.

And I think it's one of those things that we're really mindful of as we go through everything. So me and a colleague of mine who works in Early Years, we're doing some of the Elklan training at the moment. So do you know what I mean? And yeah we're in... Elkan have got this thing, where you can now become a communication friendly school, so we’re rolling that out. Yeah I've done sort of training on things like the blank levels and that kind of thing to really try and draw these things out for children. So I think it's one of those things... I think in conversations with children and particular children that we would target as well, we would try and teach those kind of skills. You know, so, ‘Why do you think that might have happened?’, ‘How's that gone?’. And ‘what would that look like if that happened?’, you know those kinds of things, so I think we try and really work hard at it. I think in Early Years, you've got more time to do that probably as well, and because it’s a play-based approached. So targeting particular children that need extra in those areas and working hard to do that. Yeah that’s what we do, I think.

Researcher 1: And you mentioned Elklan and you’ve got your kind of full literacy program... Are there any other like specific resources you’d use or questioning technique, or anything else you’d...

Teacher 3: Yeah I think – we’ve become part of the NELI project this year.

Researcher 1: I’ve heard about that.

Teacher 3: And that has been brilliant. That‘s really built the children's confidence. What I really liked about that is that it does, not just like the vocabulary the children use, that some of these programs do, like Elklan’s got a quite big thing on vocabulary as well, but it does all the different bits that, ‘Can they repeat back a sentence?’ and all that kind of thing as well. So we've worked quite hard with them to put those sessions in as well. So yeah we've got these structured things. And we work quite closely with the speech language therapist; so our language speech therapy has got about 16 of our Early Years children on her books at the moment. And she sort of suggests various things to help them with those skills as well.

So we've got specific programs, I think, lined up for some of the children or all of them, you know, whole class teaching, as well as just like that sort of day to day talking that we do with them at their level and joining in their play and things.

Researcher 1: As well as asking those questions like ‘What might happen next’, ‘Why do you think you've done that’... Would you do any modeling, like thinking aloud this kind of...

Teacher 3: Yeah yeah definitely. Yeah absolutely. Like ‘I think this…’ I guess modeling sentences and things like that for them and yeah it's really helpful.

Researcher 1: I’ve got some examples. So I'm going to share my screen. These are some sentences which are obviously a bit out of context, not like when you read in a book, which might require some kind of inference. So don't worry too much about the labels I gave them in green if don’t recognize those; those are the kind of technical terms. Don't worry too much about these. But I'm interested in looking at these examples: are these the sort of things you might be picking up when you're reading with your children or your reading aloud? Or are they things that you think [] or sort of I would have noticed that myself? Yeah, just your reaction to them. You can read them; I'll let you just read them in your own time.

Teacher 3: Certainly the first one... like that’s strange, isn't it? A tree wore a white hat. Why would that happen? What does that mean? Is it an actual hat? And it's funny actually reading those because I think I can picture children in my class that go ‘Yeah! Yeah! A hat!’. And other children that would be like ‘No, it’s just that it snowed.’ Like that kind of... And I guess like in with all this, like the real kind of core of listening and concentrating go with it, don’t they. We've also run the Attention Autism programme for some of our children to really get them to get to concentrate on something.

‘He got the big blue Cup’. Again like: why is it big? and any particular reason like, Who is picking it up? Maybe John.

And ‘Do you want to play football this evening?’ ‘I’ve got piano lesson.’ I don't know – like I'm not sure. I guess that would be like more of a kind of conversation I suppose. And yeah like again, we might let you talk about what we like to do in the evenings and then...

Researcher 1: I mean the inference I guess I'm expecting someone to make that is the person answering ‘No’, that they are not able to play football, because I’ve got piano lesson.

Teacher 3: Yeah that’s true.

Researcher 1: I think, for an adult that's fairly automatic, perhaps.

Teacher 3: Yeah yeah, I'm not sure for children. My children at our age that might not be... say much like probably what they just be doing is just talking about what they're doing, rather than listening to the question and answering it I would think. So yeah, I think that would be... Yeah yeah the sort of thing I guess we've got to like yeah teach them to do haven’t we.

And like ‘he finished his book’, like ‘What happened’ ‘What was it about’ that sort of thing...

Researcher 1: So with ‘finished’ there is a kind of inference that you have to have started it. It’s again a completely automatic thing [for adults].

Teacher 3: Yeah gosh it's just in everything.

‘The fire alarm went off today. It was the blue classroom again.’ I guess you just want to know what's happened there?... Yeah it’s obviously been off before as well and what's happened in there, like what is going on in there? Blue classroom. And I guess like we're really mindful of trying our best to explain those kinds of things to the children. We had a fire alarm practice the other day, and we were careful to sit them down and say to them that that was a practice, that sort of thing. That was just because we've gone back inside after standing in the playground. and, like the head’s given the all clear and we go back in, we can't assume that our children will know that it’s now safe to go back in. So I think we do try and be careful and mindful, especially at the age of our children. But some of them will know, oh therefore it’s safe and they’ll kind of pick that information up, but others are more worried that it is either going to go off again or there's still some danger, but for some reason we're going back inside, even though… Not really understanding nicely.

‘John gave jack a book because he thought he’d like it.’

Researcher 1: I think, one of the tricky things is maybe matching up the ‘he’s.

Teacher 3: I think yeah some children just really can't do that. They get the first bit of a sentence; they get the end of the sentence; but they wouldn't necessarily know who liked it. Thinking that through. And I guess using visuals and things like that and sort of modeling like acting it out, sometimes can help with these kind of things as well, like visuals are like a massive for children that don't always understand verbal instructions. We try to do that quite a lot as well, I think.

So I guess the second one it’s like the difference, isn't it? [] Absolutely yeah. And how those two things can be different, like which one thought which.

Teacher 3: I guess the last one: ‘where might they be? Where might they have arrived? like how long they've been traveling for that?’ I guess there's loads there, isn’t it: Where might they feel that salt spray on their faces? And I suppose as well like giving... when one thing we are mindful of is because our children... some of their life experiences are quite limited: when - we always find this when they get to the Key Stage 2 SATS - that actually they're reading a text about pandas the other year, and some of them have never seen a panda. Didn't really know much about pandas, so were already on kind of the back foot for reading comprehension before they start, I think. So I think like, one of the other big things as a school, we tried to do is to work really hard on our curriculum to make it... so the children learn a lot of knowledge along the way as well. So that even if you've never been to sea, heard the gulls… You've somehow been sort of exposed I guess to the experience, so when you read a sentence like that you've got a clue as to where these people are, as opposed to supposed to…Yeah, I guess, but yeah we try really hard on that.

Researcher 1: I’ve just got a couple of final questions. This one we kind of said already, but I’ll just ask here anything else you want to add. So do you feel that inference making is an important part of reading and communication or not?

Teacher 3: Yes, definitely, I think so. I think the children... like it's reasonably easy for them to learn to read a text by just decoding it. But to actually understand a story and all the things going in, you have to be able to infer, don’t you? Otherwise, you don't really know like, just even simple things like the character opens the door and they’re holding a present; we; it must be somebody's birthday or Christmas or something like that, mustn’t it? So I just think it's vital, isn’t it, vital that they understand. And I think even in ability to have conversations with each other as well, they have to be able to infer information about that don’t they. It’s part of understanding, isn’t it?

Researcher 1: Is there anything you would feel would help you with teaching these kinds of skills? Do you have questions or kind of areas that you think ‘this is useful’ Or do you feel like you are very well resourced?

Teacher 3: Reading those sentences I think I'd love some training on these kind of things, because it would be really useful to be able to spot them all for myself. And yeah to teach them to the children, I think, like there's quite a lot of things that I think ‘Oh, I understand this’... I don't think we understand all of it. Yeah, for sure. Some training would be great.

Researcher 1: What kind of... If you're in that situation, and you have the luxury of time to do some training, what kind of thing is most useful to you as a teacher, like what format or…?

Teacher 3: Yeah, I can imagine just sort of turning up an afternoon's training session for a few hours and somebody talking about the importance of it and that sort of thing, but also like pointing out all those things that we infer in conversation that we don't realise. But I think as adults, we just do it so naturally, don't we? Lots of us. But actually showing children and having to teach children that... I think being in Reception, we're very mindful of lots of the things that we have to teach them anyway, because they just don't understand the basics of communication and that kind of thing, or lots of them don’t. And they find that hard and have communication and language difficulties, and that kind of thing. So we're mindful of that. But I think digging right down into the things that they find difficult and having some training on all the things that we... But just even having time to sit down and think all the things that we infer within an hour or whatever. And then... sort of showing actually lots of children don't understand these things, and it is really important to teach them, and strategies to do that.

(transition missing)

Researcher 2: So, yes I'm interested in the play aspect, and specifically in kind of pinpointing the kind of...So I look specifically at...I guess the one that labeled reference so "pick up the big blue cup" being in situations where you have obviously, multiple cups in this example and teaching children to give the correct amount of information, as opposed to just pointing or saying, "give me the cup" or "give me a blue cup" if there's a smaller one etc, so that's the first part, and the second part, which I picked up that you, you mentioned specifically was anaphora resolution, so the one with two parts of the sentence with the pronouns at the end that refers to the beginning, so that's something I'm very interested in, and specifically you mentioned that for that you sometimes use visuals and modeling and acting out, and I was wondering if you could give me any kind of example or explanation of what you mean by that, 'cause that's very interesting to me.

Teacher 3: Okay, and...hang on I've forgotten the first bit now, what did you say about the big blue cup?

Researcher 2: Oh so, right now, just...this was just kind of an overview of what I'm going to be asking you about, but to begin with, the the long sentence with the pronouns, yeah the first the beginning (?), I was wondering if you had examples of how how you model that or, how, you would use visuals with that?

Teacher 3: I think, I guess with things like that, being really careful to point out, like, exactly what has happened, so... I guess I can't think of a specific example that I've used though I think... I mean I'm sure there is some but...yeah I think just just getting the children, you know, so "let's act this out", so you've got a book, and, and you thought he would like it, so you...you gave it to him, because you, you know, like who's who in this kind of sentence and we do quite a lot of that and, and I guess like I was just thinking that this, um, like also means that the children have to, um, well we have to pick up, or they have to explain that they don't understand, and I think that's quite big for children to do because I don't think they always understand that they don't understand, um and then also sometimes it's the, like, ones that are just not as good at communicating anyway so probably a lot of their lives they don't understand what is happening, so I suppose, like, within this we have to know them very well to know that actually when we doing this thing that we're doing and that (?) they might not understand, so we have to work really hard to make sure they get it and like the ones that find communication easier, I think, would point that out because they'd understand where they wouldn’t understand (they would say as much) but yeah. Yeah I think I mean visuals we use such a lot all of the time anyway, so, um, whether that's doing you know pictures from a book or whether that's just pictures of an event or something like that. Like we were talking about the queen's coronation just before we broke up for half term because of the Jubilee and I showed them a video of that, but we also then acted it out and, and made an orb and a…thing (whatever that thing is) and the crown and all those kinds of things to really kind of hammer home like there...yeah what was happening. And we did the enormous turnip a little while ago and we acted that all out as well, so that they would really understand that this one was first and then there was that one and then that one went and joined and then they... and what was lovely about that is that we read the story a few times and then, at the end of the story, all the characters fell on the floor because they've all been pulling up the enormous turnip and so I then turn the page ready to say "and then they all fall on the floor" and the children just all fell on the floor because they'd understood what had happened and in the acting out, they were kind of ready to do it. So I think like that's that's quite nice because that did show their understanding of what was coming. Yeah yeah yeah is that...is that what you wanted?

Researcher 2: Yes, thank you. Um, you mentioned a few times, you've mentioned reading stories to the children, you mentioned them learning to read, but do you also ever either train or teach them to tell stories so kind of oral narratives.

Teacher 3: yeah so um what is that thing called? There's a book isn't there about a lady who does – the helicopter stories, d'you know that? No, okay! This lady's written a book about helicopter stories, I don't know why she calls them helicopter stories, I think it’s explained in the book ...can't remember, but the idea is that you sit around in a circle and one of the children tells the story, and it can be any story and then as adults, like, I think, part of the thing is, is to get them realizing that they can A) tell stories and B) that they can write stories... and so then a child tells a story and the adult writes it, so as they as they tell it and you just take it in turns to tell it but we write it down in a book and it's just like not very long story – it might only have like three events or something you know, like there was a princess, the princess found a bear, the bear and the princess like lived in the castle – like that kind of thing, like they're not very long complicated stories –but then the idea is that you then act them out. So, particularly in the autumn term we try and do quite a lot of that, so I think you... the children tell the story, you write it down, and you retell the story back as well with them in the kind of way that they've told it, and then they act it out, so I think that's really nice and I think they do quite a lot of storytelling. Like I quite like, um, when, um they... you've read them a story and they've got one in their mind, or the story that you're doing that week or whatever, and then they they use the small world characters to kind of retell the story, I quite like that. Or they, um, they do that, but then they slightly change it, you know like some dinosaurs get involved or that kind of thing and that's okay, so um... yeah yeah I think they do quite a lot of storytelling and yeah both inside and outside. Like we got quite into which is a dinosaur topic and we got quite into Andy's dinosaur adventure – d'you know Andy's dinosaur adventure? Um, okay great well he's great, he goes off to the museum I think it's an Australia, but I'm not sure and and he's got a backpack basically and he goes around and he finds things for the backpack to like help dinosaurs and whatever...anyway, and so they just put their backpacks on and out they go, and they're often like dinosaur adventures, and that kind of thing and then come back and tell you what they've been up to and and then they're kinds of stories so...I guess like yeah like in a formal way we do for the helicopter stories, but also in like little ways, you know they're, yeah, stories of their adventures and what they've been up to...

Researcher 2: And so, as [Researcher 1] mentioned I'm interested also in play-based approaches so here I already hear little bits of acting out, and like props and everything...um, would you say there are other ways in which you incorporate play into your teaching? How much... what proportion of kind of your teaching them would you say uses play based...

Teacher 3: yeah I think I mean we have children come in at quarter to nine and they do various activities, and then we do phonics until half past nine and that is a very like structured, formal programme that on the surface looks quite dull, but the children quite like the repetitiveness of that space. And, and then they're pretty free to play completely freely until about twenty past eleven when we have maths. Now maths I try and make really fun, so I think like there is quite a lot of play in math as well, particularly the puppet that keeps getting things wrong and that kind of thing so like... and that's quite fun, for us, but I think that kind of... what we what we've done with our timetable, or tried to, is... is make it so that the children have got a long time to play, because we believe that that is really important for them. And so, rather than an hour to play, tidy up, do something else, oh now you've got another hour to play, that kind of thing, like we've...we've tried to give them nearly two hours to just go off and do whatever it is that they want to do and obviously we set up activities for them and and put things out for them, and whatever, but you know, probably at least half their time they've disregarded that and done whatever it is that they want to do and got something else out that we didn't put out for that day or whatever. They can sort of help themselves to anything really and make anything, and I think...but that's quite nice because what you then see is that they use lots of the areas of curriculum, so they'll go off and decide they're going on a dinosaur adventure but they need the pair of binoculars. So off they'll go make themselves a pair of binoculars out of, modeling whatever, write something on them, and you know and then off they'll go to go on their dinosaur adventure and then they'll find something and they'll look under the magnifying glass at it, you know that all of those kinds of things like it's just...the whole of the the curriculum is just kind of, yeah, I guess rolling into that. And then the afternoon follows about the same, but they have about an hour to play, I think, and so yeah our...our curriculum for the afternoon is, like, music or art or something like that, um, which I guess is slightly more formal but, um, you know is super fun, playing with all sorts of sounds and that sort of thing. But, and then sort of topic lessons because it's a knowledge based curriculum like they tend to be slightly more formal as well, I suppose, but again like they're sort of acting and and that kind of thing built into it, so yeah yeah I think there's probably like playing in lots of things, yeah

Researcher 2: Okay, okay that's interesting, so it seems from what you're saying that you'll have a separation of what we would call free play, so completely leaving them to their own devices with, you know, resources, and then mostly formal learning, with some playful aspects.

Teacher 3: (nods) yeah

Researcher 2: Does it ever happen, are there any kind of areas where the two are brought together in the sense of...so we're studying something called, kind of, guided play, which is... the example that's often given would be an interactive, a playful exhibit at a science museum that's been designed to be where the child is meant to be very much active, it's meant to be child lead, but on the other hand, it's very much created for a learning goal.

Teacher 3: (nods) yeah

Researcher 2: and generally the adult is there to provide guidance

Teacher 3: (nods) yeah

Researcher 2: and kind of scaffolding. So kind of something in between, essentially... would you say that's something that...

Teacher 3: that's, yeah...and I think our free play is probably more like that, so lots of, um, the activities, I mean they are free to do whatever, but I think, um, the activities that we put out, um, are certainly more like that, you know, that their sort of end goal I suppose in mind. And they're building skills and like often adults are involved in those kind of things to help them or to guide them or to talk to them about it or, um, that kind of thing, whether they're involved in the process of it or whether they're involved in the end approach. And uh yeah I think often like they'll...like… a big one, recently, is that they've made a cinema in the classroom – they absolutely love it – and so I think, um, yeah so then you know they start lining the chairs up, they're making the signs, they're making the food for it, um, numbering the seats, they're making tickets for it, you know that kind of thing. And as an adult you end up involved in that kind of thing you know. And then you say "Oh, why don't we, I don't know, write a list for a menu for what you're going to sell" or whatever, so, then there we go - we then do a bit more writing and that kind of thing, so I think you're absolutely like, yeah, I think, as adults like carefully guiding those things. And we did some training as our early year staff on sort of useful interactions as adults with the children and how we take their learning on it in the interaction that they've kind of started I suppose, but we then slightly take on, to give you know, uh, I don't want to say more educational outcomes but like you know slightly, um, you know, because it guided outcomes to whatever we think that they need more at that time. And then how to sort of record that for parents to see and for us to use as evidence and that kind of thing. So yeah I think I think we do quite a lot of that and I think it sort of depends if it's the morning, where I'm changing all the reading books, you know, or doing a lot of writing with them, or whatever, it might be less of that, but as adults, we, we try to always have at least one or two people who are kind of free to do that with the children. And I think sometimes we set up these kind of experiences as well, so there's a couple of children in my class who, um, really struggled to listen and to learn from formal teaching lessons, particularly our topic lessons so I try and pre-teach them the information for the next week, the week before, but I try and do that in a really fun way, so the week we were learning about paleontologists I took them out to the mud with spades and made them dig for dinosaur bones that I'd hidden so that then when we got to the next week and we were talking about the fact that people dig for dinosaur bones, they'd kind of had that experience. But they sort of hadn't known that, by the way, next we're going to be learning about this, d'you know what I mean, like they sort of...yeah so I guess yeah some things are...and they thought it was brilliant and did it for weeks after that so yeah. I think often whatever we set up and we do with them they'll then do it again and again and again, I guess, like you know, probably parents do this with their own kids, they know that if you do something with them they'll then do it again and again and so yeah it's that investment it's really important.

Researcher 2: Actually, more out of curiosity, so you mentioned kind of early years stuff, so do you usually have teaching assistants in the classroom or... in terms of kind of small groups, one on one, big groups that are...how would you say your time is organized in that regard.

Teacher 3: yeah, so I think um in my classroom I've got one teaching assistant for me for the whole class and we've got a big outside area so generally one of us will be inside one of us will be outside and I spend the morning inside and, at the moment, uh, like some mornings hearing children read and sort of catching them up a bit with their reading and a bit with writing, um, but also finding time to sort of play with them and that kind of thing, and particularly at the end of the year, and running a few interventions, my teaching assistant will do the same. But in the afternoon so she'll be inside running small groups and that kind of thing with them, um. [Removed more detail on children with Tas for anonymisation]

Researcher 2: And then the last little bit...well actually something I made a note of as you were speaking earlier so, um, so obviously you picked up on the first, um, the first example that [Researcher 1] had which was metaphor, so you... with the snow and the white hat, so you obviously, um, picked up on the fact that children would struggle with that which makes sense. Do you see this as the kind of thing that could be interesting to have a lesson on, that could be relevant to this kind of age group or, or is it... are the children too young essentially to look at things that are very... ah I have French word in my head...image based.

Teacher 3: yeah yeah yeah I think it's, for our age group I think it's this sort of thing that I probably wouldn't do that, and I think any kind of um...for more teaching of of any kind of... you're just going to lose them, I think, after about ten minutes I think, particularly those that struggle with it, who are the children that probably need it the most, so I think it's the sort of thing that, um, picking it up in like snippets in books whenever you read them. And, like we read a story to them like at least twice a day, every day, and, as well as the following story, as well as books they read, you know that kind of thing. So I think there's there's quite a lot of opportunities, I guess, for it to just come up and in a sort of less formal way, and I think that the thing with the early years curriculum – and I taught most of my teaching career in Key stage 1 – is that you just have to trust that it's going to do the job that you hope it's going to do. So, like giving children lots of time to play and giving them, and sort of having those times that are not planned for when you read them a story – I'm going to teach them inference but I haven't planned for that particularly, I might not even have read the book beforehand, if I haven't had time they just plucked one out of the book box and I just read it to them like, um, yeah I guess you just have to trust that those children are going to learn those things without a formal lesson on it probably. And if I wasn't jumping forward with them because I've identified a need I would do that more one to one I think, because I think, then you get a better result with them, and then I would with a whole class lesson, but it is the sort of thing that I can see that you could do in year one or year two, to really teach those skills I think.

Researcher 2: And would you say that um things like metaphor, so kind of extreme cases of inference I guess, do come up in the... in the books that you, that you read?

Teacher 3: yeah I think they probably do yeah, yeah, or like the children will say something, just the thing is children say slightly ridiculous things all the time, so, like you know, and you say "really" to that, "oh no that's not what I meant I meant this" you know, like, I guess, I guess that kind of thinking can come up as well. So um yeah, yeah, I think, I think they probably do and I guess that's where you just, yeah, you've got to have high quality texts in your classroom and trust that those things are gonna, um, come up as all. Like one of the jobs I did when I moved in to that classroom was sorting out the books and got rid of all the terrible ones, and then ordered some good ones that I knew were going to be good, because I feel if the children are just going to pluck one out because I've chosen them to go and choose a story for the end of the day, um, then I need to make sure that it's going to be a good one that's going to teach them something rather than some terrible, terrible book, um, that doesn't even resemble a storyline properly, um, so, yeah. But I mean I have heard that some schools, they they do that thing, where the teacher chooses two books and then the children get to vote during the morning of which book they're gonna read...well, so I guess like having that kind of system that I haven't done it and would be the sort of thing, where you could definitely plan to teach things, so this week we're going to plan to teach them, you know, how to infer or whatever... one of the children in my class has been working on this kind of thing with his speech and language therapist to try and really understand people's sentences, probably more simply, than, um, than that kind of thing but, but you know she sent us a lot of pictures for him to look at and to work on, so I guess um yeah that kind of thing is done as a one to one specific basis if we know that specific children need it so we wouldn't just be trusting that to ad hoc, like for everyone else.

Researcher 2: Okay! So then, the last thing is going back to the big blue cup, um, that I mentioned earlier, so for that, I guess my question is first of all, in your observation of children do..do you... would you say that they are usually good at first of all, using their words as opposed to pointing and gestures when they want to request something, and if they do use their words, how much...how detailed or... would you say they were kind of naturally able to be if they're given an array of similar things that they have to kind of...they need to make sure that it's an ambiguous which one they want.

Teacher 3: yeah yeah, I think, like for our children, most of them, I mean – I've got a lot of summer born children, half my classes is summer born this year, so I think like they're becoming five at the moment, and, and some of them would be spot on with that, like they'd realize that the cups are different, even if they would like different shades you know and, sort of blue or whatever, you know, having to point out which one. But for other children they'd find that really difficult. I mean the classic lesson is, I don't know if...there was this classic lesson from a few years ago where, um, you'd have to make a sandwich and you'd be teaching instructions to Year 1 or whatever and you'd be making a sandwich and then the children would say oh, "get the bread out" so you get the bread out, but you wouldn't put it on a plate, you know and then they'd say butter it, and so you just butter everything because they wouldn't say butter the bread, you know, like that kind of thing, and children find it very funny, so I think like I think they sort of learn to be specific, but I don't think they are particularly specific and and it would only be like, if you... if you then got it wrong, but you said what you want and then realize that ‘Oh, there are several coloured ones, I'd have to be clear with my language – so yeah I think like expect those little ones again that are good at communication with things like that but I think, I mean that's where like again, I think you know, we know that children that struggle with communication, and we know the difficulties that they have and so actually like um I did um, we were trying to work out whether one of the children in my class would just follow everybody else, or whether he was actually able to listen to the instructions specifically, and do what he'd been asked to do. So at different times of the day, I gave him different instructions for different things, and he did quite well actually I'm thinking Oh, you know, he was able to get his coat and put it on the red table, even though it was only 11 o'clock in the morning or whatever, he didn't need it, you know that, like that kind of thing that he was able to do that and that quite surprised me, so I think probably for the list, like if I gave an instruction like that they probably would be able to do it, but for them to be able to say it, I think they'd find that hard. And roundabout way of saying.

Researcher 2: Do you think that would be potentially something that's kind of an important skill to train if...

Teacher 3: yeah yeah. yeah absolutely like I think it's one of those things that again like we try and work really hard at and we forever try to say to children "you have to use your words", you know, explain what you mean, that kind of thing you know, and to them, so I think it's, yeah it's one of those things, I think we, you know, try and... and I'm forever giving them instructions to go and do things for me, um, to make sure that they're listening and able to follow those instructions but I suppose, the challenge is making them speak and and getting them to describe and things like that, what want to say, yeah yeah yeah.

**Teacher 4**

Researcher 1: So I wonder if you can just begin by saying, like a little bit about your school and setting just to give an idea like you know, is it state or private sector. And what age are you teaching? That kind of thing.

Teacher 4: So I teach in a state primary school in Year 4, so Key Stage 2, lower Key Stage 2. And I have 25 children in my class. It’s quite a small class size for a state school and they're quite high ability children. I have XX EAL children in my class. I have XX SEND children in my class [anonymised precise figures). I have primarily girls. [anonymised details about gender balance]. It changes the dynamic quite a lot. We’re a knowledge-rich school, so we focus a lot on how children hold on to knowledge and retrieval practice. It’s like a slightly different curriculum: we focus on kind of like facts, but then learning them in statements, so it's quite cool. But yes it's quite heavy curriculum, but the children really enjoy it and get a lot out of it, so it's a really brilliant school.

Researcher 1: Thank you. Have you always taught Year 4. Have you taught any other years?

Teacher 4: So I've done Year 4 for two years here and then before that I did a year in Year 6, and a year in Reception as well, but that was a different school, a much smaller school with mixed year groups and very different style like... It had 100 pupils in the whole school, whereas here there's about 500 pupils. So it's a very different dynamic in school.

Researcher 1: Feel free to you know draw on your experience not just from this year, although you can do that if you want, but from your other years and settings as well if you want. Starting to think about inferencing. I think both the Key Stage 1 and Key Stage 2 curriculum talk about this in the national primary curriculum, which says that: Children should be taught to understand the books that they read or the books that they hear by learning to infer or make inferences on the basis of what is said and done - you probably know that! When you read that, what kind of inferences jump to mind? What kind of inferences do you think this is talking about.

Teacher 4: I think of guided reading straightaway. So we have quite a ridged, I’d say is the best way to describe it, way of teaching guided reading, so that like a learning objective will be to infer. So we focus on inference or vocabulary, or... So each lesson has got quite a direct aim, and then we do certain things to ensure that... We also do different styles of guided reading depending on … there’s loads…. Like we have this thing called DLG and I for the life of me don't know what DLG stands for - dialogic, something - basically like a book club we do. So, we read a book like a classic, for example, we are reading Journey to the Centre of the Earth but an abridged version. And then we pause at points and then discuss it: how has the atmosphere changed? and how can we tell things about the characters through that? But then we also do the more structured ones with questions that the children have to kind of do it independently. Yeah there's opportunity for them to discuss it, but also to do it independently. And then we also do another book: we do class book, where I read it to the children, and then they pause and ask questions or I’ll ask questions to them about what I'm reading. So there's very different ways of doing it, but yeah we do all of them. So it's quite a lot, but it's I think it really helps them.

Researcher 1: Okay, thank you. So you talked a bit about this already but is there any other ways in which you incorporate inference making into your teaching?

Teacher 4: By what? By looking kind of deeper into stuff or...?

Researcher 1: yeah anything that comes to mind, apart from that as you've already talked about a bit. So if there's nothing that you can just say...

Teacher 4: I'm just trying to think... And we do more like retrieval practice and how we remember facts and how we recall facts in statements and stuff like that to help them recall it. But no, just kind of like looking deep - and comprehension questions is mainly how we do inference in any in any subject, not just in guided reading in English. We would use it for all subjects and yeah just so they are understanding the text on a deeper level. We do a high quality text reading and that's what they are called. And they have to try and work through that independently and take from the text like key facts, and what do they understand, and why is it said in this way, and discuss that a lot with their partners and stuff. So it works through all subjects, I guess, but mostly we do it through questioning and discussion, would be the main way.

Researcher 1: I don't want to assume, but was that kind of similar when you did in Year 6 class? Maybe quite different obviously in Early Years.

Teacher 4: So in my previous school it was quite different because I don’t think they focused on it as much, but I'm going up to Year 6 in this school next year. And it's very - not intense, that’s not the right word - but like it's very... I can’t think of the right word….

Researcher 1: quite intentional?

Teacher 4: Yeah. They really want that to be the goal, something that the children leave being able to do. Yeah we go heavy on it – that’s the best way of putting it.

Researcher 1: When you were in reception, was this something that kind of entered into your practice there; obviously it must have been quite different?

Teacher 4: Yeah, I think it was slightly more about learning about emotions and why might people be feeling in a certain way, and why might people be reacting something like in conflict resolution, I guess, like why might someone do this, why might this... working through different life skills, more than reading heavily, like into books or into texts. So it was more into learning how to be part of a school and how to be in a certain way, and how talked to people and what they might react in a certain way. I mean that happens all through the school, but obviously in my head... Inference, I relate straight away to guided reading.

Researcher 1: yeah. You've already mentioned a couple of these. But are there any other specific resources that you use or you’ve seen others use to teach inference?

Teacher 4: In what subject specifically?

Researcher 1: Probably in reading, although if any other area comes to mind like...

Teacher 4: Yes, it is the VIPERS.. Have you heard of?

Researcher 1: Yeah, I have heard of that.

Teacher 4: So you can use special texts like that. And in another school I did a placement on my PGCE. They used to do it as a reading carousel so there were different tasks related to different books and then they had to go around and work through the tasks, so it was kind of more lighthearted way of doing it. And obviously we do it like a book club here. Yeah comprehensions. There's also, I'm sure you know, do you know Twinkle the the online resource website? They have these dogs for comprehension skills. They all have names basically, the dogs, and you point to the dog and then the dog has loads of questions underneath it and then - it is so random, it’s a dog, but I think it's Inky, the dog - and, like the dog has all these questions so when you are reading and, if it is focused on inference, you can look at that and start to go through those questions independently or with a partner or as a class, which is quite a nice way of doing it as well. Yeah, quite like the dogs!

Researcher 1: That’s fine. To go back to the book clubs: it sounds like, if I understand it correctly, in that, it's not perhaps just you, but the aim is to get more of a discussion going rather than….

Teacher 4: Everyone has a copy of the book and the teachers pre-read it and pre-set some questions or bits to focus on or even like looking at the picture in the text, and being like: What can you tell from this picture? Or at the beginning of every book of this style, they have like the characters in the book. So it's like this [shows] and you read the bio of the character and you're like, ‘What do you think this character is going to be like?’ ‘What can you work out from this character?’ ‘Who’s the main character here?’ Just trying to work out just from the little bits of text, the significance of each character... So just little things like that. And then you either, I always ask my class if they'd prefer me to read or they read a sentence at a time, or like a paragraph at a time. Because some children don't enjoy reading out loud to the class. And then every so often I'll pause and say, ‘Okay. So what do we think about this?’ Or a child will put up their hand and say, ‘I think this’. And then always at the end of the book they have ‘Food for Thought’ - so this bit here. So it works through bits of starting points like ‘Why do you think he does this?’, ‘What does this add to the story?’ kind of questions. Then we go through the themes of the story so you really get quite deep into discussion about what you're reading about and children's perceptions are phenomenal. We read *Jane Eyre*, and you know the sentence at the end of *Jane Eyre, ‘*reader I married him’, and children were like ‘Wow this is so powerful’. After all, you know it's just so nice actually have that discussion with such young people about... Their take on the book is so different to someone else someone older so that was really lovely, really amazing. And we also did *Call of the Wild*, which is a very depressing book about dogs killing one another and he becomes a wolf, I don’t know if you’ve read it. It's pretty harrowing. But one child, at the end of the book... Isn't it interesting how at the beginning, death is really negative and then at the end, it seems like as an achievement because he becomes a wolf and he's killing prey? And I was like, ‘Oh my word!’ I didn’t even… they have this amazing take on the book because they get to discuss with other people so it's really cool.

Researcher 1: Thank you, that’s really interesting. I’m going to share my screen and show you some possible examples of inference. So here are some possible types of inference. We've discussed some of them, but not all of them. Don't worry about the fancy technical terms in green. But it would be interesting if you don't mind, just go through them and have a think about: Are these things that you would be including in your teaching or not? It's fine either way and or kind of your reaction. Is this something that's to you would think is too basic for your children or are too complicated that kind?

Teacher 4: Do you mean using those phrases specifically as examples, or the whole?

Researcher 1: Yeah using the phrases as example. So as an example of metaphor, for example, so...

Teacher 4: No, I would definitely use that. I would definitely use the metaphor one.

Researcher 1: And oh sorry I don't mean necessarily that you would use that specific example, but more just would you comment on metaphor and that's an example of metaphor’. Do you see what's that mean?

Teacher 4: Yes, no, no, so teaching metaphors is part of the year 4 curriculum, so we have to go into that kind of detail, and then the children will come up with their own examples of writing their own metaphors and similes. And then you have to try and break up the understanding of similes, metaphors, personifications. You have to try and … you have to be able to identify all of them. So that is yeah definitely we do that - we did it last week.

‘Pick up the big blue cup’. But as in reference, like pointing to the cup, as in that...

Researcher 1: Imagine a scenario where maybe there are a number of cups and you have to be able to identify the big blue cup and not the little blue cup, so to able to think about which one you mean.

Teacher 4: Yeah I would do that. When I'm speaking as well, I have to be quite specific with the children to... Like I’ll be like ‘Go over there’. And they’ll be like, well go and stand by the door. Like they really need the the instructions like that as well, so that's something yeah they don't just know.

‘Do you want to play football this week?’ ‘I’ve got a piano lesson.’ Relevance implicature – I don’t know what ‘relevance implicature’ means.

Researcher 1: Don’t worry about that. You get the interference here…

Teacher 4: “Sorry I’m busy”

Researcher 1: Yeah exactly, but not directly answering the question.

Teacher 4: Yeah. I don't think we would do that, but I imagine they would be able to understand that. I think they would be able to understand that. So they will be fine with that. They'll be fine when “he finished his book as well”.

‘The fire alarm went off today. It was the blue classroom again.’ Yeah they would know when the fire alarm does go off for example. They'll be like, ‘Oh, there is this child who sets it off, and they’re like, ‘Oh, it might have been him.’ So they assume if I don't know that it was a planned one now think that this certain child set it off.

Researcher 2: Sorry, here in that example – I’m quite interested in metonymy as well - would they understand that... I was a bit confused by this one. Is the classroom painted blue?

Teacher 4: Yeah or maybe it's like the name.

Researcher 2: In between, for example, do they understand: I guess the classic example is something like “the White House said that they were going to be involved in Iraq”. That's not a sentence you would talk about to the child. But by the ‘White House’, it means the president. Well, that one is kind of...

Researcher 1: Number 10 meaning Boris Johnson.

Researcher 2: Yeah it's the kind of using...

Teacher 4: I think they would struggle with that. I do think I think they would find using well known things. But then they have a different level, don't they? Their understanding of kind of popular culture to then use that as an example, is slightly different: like someone will say something, and then it because it's a Tik Tok phrase or something, they'll make a joke about it, so they put heard the phrase and they'll be able to take it from there or someone will say something and they’ll... With certain phrases they'll be able to infer, but they don't have the same knowledge of the wider world in those ways. I don't know if it was a school-related thing I think they'd be able to... Like I'd say ‘Go and stand by the glass door’. There isn't really a glass door but there's a door we call ‘the glass door’, so they could do it in that sense. But I don't think, for wider world...

Researcher 2: Now I think of an example, metonymy is always a difficult one. There are so many are based on… Yes, I guess using maybe *the Crown* to mean the royal…

Teacher 4: They would understand that. We did the English civil war. And you would say that, for example in the civil war, it was basically the King versus parliament, wasn't it? But you wouldn't refer to it as the King, you would refer to it as the crown. You wouldn't refer to Oliver Cromwell, you would refer to as Parliament. But you know, like they could do it like that, it has to do with a subject that I think they'd be able to understand, but, in general terms, probably not.

Researcher 1: Thank you. Sure that it's a bit subtle, I’ve realized. I was meaning it to be like ‘the blue classroom’ is like metonymically referring to the people in the blue classroom, like someone or something in the blue classroom rather than...

Teacher 4: Yeah, I thought of it like that. If your class was called like ‘Sparrows’, you could say, ‘oh it was the sparrows room again,’ which would make no sense to anyone else.

Researcher 1: Yes, it was meant like the blue classroom, like that you might name a classroom or a class.

And in the next one: this is about matching up the pronouns. So ‘John give Jack a book because he thought he'd liked it’.

Teacher 4: Oh, so you know that John thought that Jack would like it. Yeah I think they'd be able to do that, and I think they could write it. I think the EAL children would struggle with that, with writing in that way, but they could they would definitely be able to understand, if I had said that or someone else said it. But I don’t think they’d be able to actually write it themselves.

Researcher 1: Then maybe if you think they could do that, it’s not something you necessarily pick up on to check they’d understood that?

Teacher 4: No. Never. I don't think I would check for understanding of that. I think it might be a bit lower down the school, because we do pronouns but we kind of like stretch them into the next bit. They already have that underlying understanding of it.

‘John gave Jack a book. He thought he’d like it.’ It’s similar but in two separate sentences, isn't it?

Researcher 1: And then you might make an inference as to how these sentences are related.

Teacher 4: Yeah no, we would do that, because then we could talk about how we could join sentences together as well. We would teach that, yeah.

‘Finally they arrived. They opened the car door, heard the gulls and felt the salt spray on their faces.’ Will that be working out ‘Who's there?’ ‘Where they are?’?

Researcher 1: Exactly. Yeah.

Teacher 4: And why they feel this? Yeah we would do that in guided reading, that kind of sentence. That's more what we would do. Or like find a word to suggest that someone was feeling scared and they have to go through and find a word or phrase similar to give that understanding.

Researcher 1: Thank you, any other thoughts on any of these examples?

Teacher 4: Most of them are in discussion aren’t they and then you have to just correct the misunderstanding if they don't understand it. There are some that we would specifically teach and then there are some that you would just formatively assess, like if a child wasn't understanding something, you would go and say to them... more like work through examples with them. But mostly we would go for the bottom one was the main type we’d focus on [the last example, ‘Finally…’].

Researcher 1: Okay, thank you. Just a couple more things. The next question you've probably already answered, but I'm just asking everyone the same questions. Do you feel that inference making is an important or an unimportant part of learning to read and of communication more generally?

Teacher 4: I think that it’s an incredibly important part. I think you can tell when a child has read a book and not understood it. I think a child gets a lot more out of the book when they understand it on a deeper level, when they start to understand like why something you said, or why it is said in a certain way. Or I think they start to write better as well if they can take the techniques as well. So there was a child in my class last year, and he started to mimic styles of writing, because he understood on quite a mature level, how the writer was making humour or being sarcastic, as you were saying earlier. And if you could see it in his writing, it was amazing that he could take that from text and use it, so that's another important part.

And I also think it's important in life in general, not reading but understanding why someone might react in a certain way to something or be feeling a certain way, or why things have happened the way they happened. But I think that all comes under inference as well, because it's all part of kind of understanding other human beings, isn't it? And there are children who lack in certain social skills, I would say, whether it be they just don't understand or they might have you know additional needs. Working on it in school and learning it really helps them understand why someone might react in a certain way, or why they don't see it in the same way; I’m sorry I sound very vague but I hope that makes sense. Yeah it helps children who don't just get it like that. It helps children learn, because it is something you can learn. If it's drilled into you enough, I think you can learn it.

Researcher 1: Yeah, finally, is there anything that you feel with help you in teaching inference making that you don't have?

Teacher 4: I think, really good examples the ones you have there to show the different types of their explanations of how to understand them. Like ‘Dummies guides’ almost to certain things, like a sentence and then like what does this suggest, or like what can you take from it, and then all the ideas you could get from just one sentence, would be a really nice resource to have. So that you could – for those children who don't see it straight away, who get quite frustrated that they can't as well, because I think some children really dislike that they don't get it straight away - I think, for them, that would be a really nice resource to have.

I also think, something that we make – it would be so much nicer if it existed - but we get pictures and we're like ‘What can you tell from this picture’. There was a picture like an athlete and I think he had come second in the race – well, this is my guess - but we gave the children a picture and were like... ‘What do you see?’ ‘Wherever you got these ideas from?’ ‘How might they be feeling?’ ‘Where do you think this is?’ and some little resources like that might be nice as well, I guess. Just because they're quite fun for the children to just have almost like flash card versions. Yeah I think those would be nice resources.

But yeah. No just really good examples for people to take from, and then something visual for children as well, because that really helps them as well. I think that would be good.

​​Teacher 5

Researcher 1: Great, we'll dive in then: do you think, could you start by just saying a little bit about your setting? don't tell me the name but, just like a state school or private, the classes you teach and that kind of thing? just to give a sense.

Teacher5: Yes, if I do my most recent the class that I had just before I went on maternity leave. So I started maternity leave at the end of January, so I did a term with this class. It's a state school, it's a village primary school and and it has a fluctuating year group sizes so: this year, we had a large cohort of 40 children, and so I worked alongside a full time teacher, I'm myself part time, and a full time teacher, together, with the children in the setting. And next year it's going to be slightly bigger' we're just going over 40 so we've got two smaller classes, so, with it being a village school is sometimes a bit of a mix and match to get it all together.

Researcher 1: And and have you taught any other years? yes, you said you were Key Stage 1...

Teacher5: So yes, I qualified in [DATE anonymised]; had my first teacher post in year five, realized that - there is benefits to Key Stage 2 - but really my heart's with the younger ones. And so, since then I've been in key stage one, and I always said, I did about five consecutive years in year one and said, "I'm year one forever" and then I got a job in reception, and this is where I want to be. Yes, about second, third year going into reception.

Researcher 1: But in the conversation like feel free to draw on you know your most recent experience, but also if there's things from from key stage one, even when you’re in year five.

Teacher5: I also taught in an international school in south of Spain for a couple of years and so some of the experiences I might be able to draw from there, in terms of language.

Researcher 1: yeah yeah feel free to draw on whatever, but I mean early years and key stage one are very much, the kind of ages, that we kind of know about from a child language work we've done before and are really interested in so.

Great so to dive in: as you probably know, the national primary curriculum for key stage one - and I wnow it's different for early years though I'd be kind of interested in how you think this works earlier so - in key stage one it says that children should be taught to make inferences based on what people are saying see when reading or being read to. And when you hear that or read that in the curriculum and I wonder what kind of inferences spring to mind?

Teacher5: Yeah so a lot of it will be done during reading sessions, either one-to-one reading or group reading and on the lower level, it would be looking at inference in the text so sometimes, using picture stories where the text and the pictures are quite different. The example I can think of the story 'Rosie's Walk'. The text of it is very simple - I'm not sure if you're familiar with it - and the text is very simple: It's 'Rosie's going for a walk, she walked past this, she walked past that' but in the pictures you can see that there's actually a fox following her the whole time. And she's doing different things to trick the fox kind of thing, but none of that's in the text. So we'd use stories like that, where you really have to look at the picture to work out what's happening just to get them that early understanding of: not everything that is literal in terms of the text is the full picture, if that makes sense.

Researcher 1: Yeah I love that book as well.

And how do you incorporate teaching inference making him in your teaching? What's your experience of that?

Teacher5: And so it would be, it would be quite explicit in Key Stage one so saying to them: "they're saying this, but have a look at their face: what's their face saying?" And that kind of thing. We do a lot of work on feelings and emotions, learning to name feelings. So it will be like "right they say that she's she's saying 'I'm fine', but have a look at the picture - is that how she looks? why, why not?" that kind of thing.

Researcher 1: And are there any specific kind of resources or methods that you would draw on?

Teacher5: yeah I did I did it my previous school: where we used to have - this was back previously when it was assessment focuses, and I think assessment focus three was an inference, inference and deduction -and I used to have like a fan of inference-related prompts. And so that was a resource, I used to use a lot, when I was teaching in key stage one, because it just gave you question openers and things like that and examples that you could use.

Researcher 1: It sounds like, from what you're saying, the main tool that you use is comprehension questions?

Teacher5: yeah it is, is a lot about reading yeah.

Researcher 1: And would you kind of model that kind of thinking process at all in how you get to make an inference, or is it more just the kind of prompting with questions?

Teacher5: prompting questions but also also yeah being quite explicit in terms of saying: 'Why is it this? why do we think that this is different?' but yeah it would it would be done a lot through texts and story and literacy, in my experience. But now, you know, in the few minutes we've been talking it's making me question - I probably should be using it a lot more in terms of like conversations and things.

Researcher 1: yeah because I guess with early years, that would be in the context of like reading a book aloud, to the class, I guess, more than the decoding stage? Is that right?

Teacher5: yeah.

Researcher 1: I've got a few examples of some sentences which might require some kind of inference to be made to understand them. So don't worry too much about the technical terms in green, I mean, some of them like metaphor, you might have heard of but others like anaphor resolution is just a fancy term for linguists so don't worry too much about them. I just put them in if you had come across them, you know, in your training or reading and they were useful but don't worry if they're not. So what would be helpful, is maybe we can just go through them, and if you could just give your reaction to sort of, say: is this the kind of thing you would pick up on in your teaching or not? Is it the kind of thing you teach to your class or too hard too easy? That sort of thing. I mean I won't necessarily read them aloud to you, but just go through and read them and kind of think aloud as you go through them.

Teacher5: And yeah yeah So the first one yeah very much: we talk about a simple metaphor for. We would talk about it in reception, even more so in key stage one. And say, 'what does it mean?' 'Is it actually wearing a white hat?' yeah so yeah that one definitely.

'Pick up the big blue cup.'

Researcher 1: I might need to give a bit of context for that one so imagine that, you know, there are a number of different cups and so you have to identify the big blue and as opposed to the little blue one...

Teacher5: yeah of course yeah yeah that's something that we yeah that would use a lot; all the time actually in reception is yeah yeah that that sort of thing would be.

Researcher 1: Like getting the children to kind of use descriptive language in their production?

Teacher5: yeah yeah it would be something that we would model a lot but yes also something that we'd encourage the children to do as well, and yeah, as part of their was spoken language we do try and help them help them to speak clearer, you know we've got some children who would just say "cup cup", we're like 'OK', and then so build it up to that kind of thing.

So the next one: yeah that's the kind of thing that we would talk about as well if we came across that in texts, we'd be like, 'why, why does that mean that we can't?' 'What does that mean?' yeah so explaining that those things will be going on at the same time, and that means you couldn't do one and, yes, and we do that one.

'He finished his book' - so what's the...?

Researcher 1: this is one is very subtle, lots of these kind of the flies under the radar for adults. Here there's something that we call a presupposition: that you have to have started the book in order to finish it.

Teacher5: yeah. Of course yeah I understand yeah no I don't think I would explicitly explain that. Yeah I think I would just assume...yeah I should. Yeah I think I would assume that if we said, 'he finished the book', he must have been that it started it that they've read it, that that yeah actually explaining to them what does finishing your book means? it means you've started, it means you gone through all the pages and you've got to the end yeah.

Researcher 1: The next one, we decided that is not the greatest example of metonymy, in talking with others. I guess the idea here - a classic example of metonymy is, for example, in the news when they might say, "number 10 announced today that..." or "the White House has said that...", meaning the President or the prime minister.

Teacher5: So you've got to know what Number 10 means.

Researcher 1: Exactly. The idea is that you're using maybe something bigger or or a part of something to refer to that person, rather than using their name. So I mean here in the example - the idea with it, rather than saying you know, it was the teacher in the blue classroom, you just say 'the blue classroom' to refer to the people in it, for example.

Teacher5: yeah yeah no I don't think that something that I have explicitly taught.

I like this, though, this is really makes me think.

Researcher 1: And then, in the next one, it's about matching up the pronouns, so the 'he's with the names. So in 'John gave Jack a book because he thought he'd like it', like which 'he' goes with....

Teacher5: Yes, yeah we do that a lot, especially further on in key stage one when the children are beginning to write more, then it's something, yes we make sure is correct orally, so that that then translates to writing. And it will be something we explain that... you can get ... which he is it? yeah.

Researcher 1: would you, again, sort of pick that up with questions if putting it in a text or giving instruction, you'd check with the children kind of orally...?

Teacher5: yeah I think so yeah and then also introduce it when having conversations with the children saying, 'oh which which she do you mean?' you know. They're trying to tell you about something, probably a playtime incident....

Researcher 1: "And she did that to me!"

Teacher5: yeah and she yeah which she? Okay, and then yeah, then you find out it's a boy. Aha, 'he'.

Researcher 1: And for the next one is like it, but you know you've got the two sentences, but then you might infer how they're related.

Teacher5: yeah...

Researcher 1: Like because he thought he'd like it.

Teacher5: yeah, "he thought he thought he'd like it". Yeah, see I don't think I would be explicit, because I'd think with that I just assume that the children understood the inference. But again I shouldn't.

Yeah Okay. 'Finally, they arrived they opened the car door, heard the gulls..." Okay, so you've got to understand the context of seaside. Yeah so that kind of thing I would: What does it mean by the gull..? yeah yeah that kind of thing we would definitely explain.

Beacause yeah, and not make the assumption that all the children have that experience, especially since you know the children that were getting coming through now, their toddler years have been in lockdown, so they don't necessarily have that global coherence that your previous cohorts may have had.

Researcher 1: yeah 'cause they've not had the experiences that you get going places.

Teacher5: yeah being able to just go on a seaside trip and that kind of thing.

Researcher 1: Thank you. Is there anything else you want to add?

Teacher5: No, is it is it helpful, what I'm saying?

Researcher 1: Yes, thank you! it's just your experience, so even 'No, I don't do that' - that's really helpful and interesting.

Teacher5: It just really made me think gosh, it like makes me just appreciate how complicated our language is.

Researcher 1: I've just got a couple more things to ask really for me and then I'll hand over to Researcher 2.

So do you feel that learning to make inferences is an important or an unimportant part of learning to read and or of learning to kind of communicate more generally?

Teacher5: yeah it's it's really important, because so much of languages is inference. Would sarcasm, and idioms - do they come under inference as well?

Researcher 1: Definitely. I don't know why I hadn't put them on that list really.

Teacher5: yeah we do yeah we do have a lot of examples where you really need to understand context and in yeah you need to infer. So it is very important, not only in their reading and writing, but before there's got to be their spoken language as well. They need to understand spoken language in those experiences, before they can then translate that to reading and and truly understand what they're reading, if they don't understand it orally.

Researcher 1: yeah so just to reflect back, you're sort of saying that especially in early years that actually the conversational skills and learning to understand where people are saying is kind of foundational almost, before you, or even as you're being exposed to texts.

And finally is there anything that you would feel would help you with teaching inference-making?

Teacher5: Just this session has helped me! Just having that yeah just having that list of - seeing the different so many different ways that inference - you know that was just a few examples. Yeah I think seeing explicitly like that, and actually stopping to unpack things that we just take for granted, I think is very useful. So yeah I mean that slide was super helpful.

Researcher 1: Do you have any other questions for me at the moment?

Teacher5: I don't think so, at this stage.

Researcher 1: I should just say that: I'm glad that it's been really interesting but I don't want you to think that, just because I've shown you all these things that adults do, that you have to go away and teach them. One of the reasons we were kind of interested in doing this project is because there doesn't actually seem to be much kind of have evidence base or kind of research on what we should be teaching explicitly to children in this kind of area. And so you know, there are some things that we know in reading or language, do you really work, like phonics, for example, yeah interventions, don't know if you've heard of the NELI intervention, for example. Really, tried and tested and we Know really work. But this is a kind of area where we need to drill down for those specifics.. there actually isn't the research there. You know I can't say to you as a researcher, 'you've got to be teaching these things 'cause we really don't know. And this is like a first stepping stone in a way.

Teacher5: Even thinking about my experience of NELI: NELI is about getting children to use vocabulary and structured sentences and things like that, and I can't recall if it does actually support inference, really.

Researcher 1: Yeah I've not been able to find - I know a bit about it but I don't think the actual content is a freely available. I've been looking at it, because it is such a gold standard for helping children.

Teacher5: yeah.

Researcher 1: I don't think it's [inferening] something that's targeted like at this level of detail. More like turn-taking and conversation skills, maybe.

Teacher5: yeah and I think it's a lot more about - it's a lot of it is vocabulary based and from what from what I remember, and I'm trying to remember the tasks that they had to do - one of the things - I can't remember the name of what it's called .. verbatim...so it's hearing a sentence and repeating it word for word, what you'd heard. It starts off with a three word sentence and then builds up, and then it's quite a complex sentence. But yes from what I remember it's more language and I don't recall inference skills being part of that.

Researcher 1: that's really interesting yeah. As I say I've not see the actual content, but there are these videos and stuff online, and it seems to be like that and yeah I mean what we - well it's not what we can do, personally - but like in terms of research in this area, we don't know yet whether, for example, just helping with vocabulary and background knowledge might be enough, and then the inferring would just happen. Or whether it is something that can be really helped and targeted, you know, like in more like clinical settings, like speech and language therapists would work with autistic children on inference skills, for example, but we don't know whether it would help generally in the classroom.

Teacher5: yeah I think I think it's definitely something that could even possibly fit into something that already exists. There's some - I keep going back to it - but something like NELI - I'm sure it could fit in there, quite nicely.

Researcher 1: that kind of group setting.

Yeah that's really interesting. And anyway that's enough for me but I wanted to make sure to give you the bigger picture.

Teacher5: Yeah no, thank you.

Researcher 1: right hand over to Researcher 2

Researcher 2: So just to pick up on a couple things that you said, so there's a few specific parts of that list that I'm kind of looking, at the first one being so what we call the reference which is… specifically I'm looking at reference production for the child so let's say there's an array of toys, objects of some kind or yeah, there's a few cups, and there's, you know, some small blue ones and big blue ones, etc, if the child is requesting one obviously they have to be precise and use their language to do that. So yeah that kind of skill of being sufficiently informative…to what extent, would you say this is something that the children can do around these ages and to what extent is it something that you would teach or at least, kind of, support.

Teacher 5: Yeah… at my current setting there's a big big focus on supporting children with their spoken language and getting them to be clear, so you know we will get the children come in that would just say “cup, cup, want cup”, that kind of thing, and and we do try to really teach them “I would like a cup, please”, “I would like the blue cup please”, “I would like the big blue cup please”, you know, so that's something that we do really try and support them in, I've been in other settings where it's not been so big a focus and part of the reason I think it's been a focus, where I am currently and, recently is… again I feel like it’s sort of due to the pandemic, we are getting children come through with much lower levels of language skills, because they missed out on a lot of their early years curriculum and so they haven't got the language skills, also the fine motor skills, but that's a separate issue, they’re very good with their finger because they've done a lot of screen work, but not necessarily, you know, sort of muscle strength, but that's a different issue…but yeah we're definitely getting children coming in with much lower levels of language skills and you know, partly it's because, you know, many of them were in a situation where they were learning at home, but if they had older siblings the other siblings had the priority for the parents or you know or the parents were trying to work and homeschool and so on, and I think the children just had increased screen time, increased time not actually verbally communicating and that's something that we've really noticed, which is why it's something that we do, because you know they have just got used to saying one word or two words to try and get their meaning across.

Researcher 2: Okay, and so would you say that most of the… so if this is a focus, would you say about is mostly just picking up on sentences that aren't informative enough and just encouraging, or are there maybe any activities that you do, that could focus on this?

Teacher 5: yeah, mostly it would be modeling, and what we try to do is just repeat back what the child said, but with the correct grammar or the correct specifics and that kind of thing so if it's like…water, “Would you like a cup of water?”, “Can I have a cup of water?”, modeling for them really how it should be said and that's something we do a lot… with children who are really struggling we would put in specific things as part of the speech and language program, yeah it'd be more intervention than something that we do,sort of, whole class.

Researcher 2: Okay, very interesting and then the second one that I'm particularly interested in is the one that was labeled “anaphora resolution”, which is the one with the pronouns…but i'm also looking at the use of pronouns in the child’s speech, specifically… actually a first question would be do you have an element of oral narrative production by the children, where they have to tell stories in any way, or things like that?

Teacher 5: Yes, yeah we do a lot of that through through our role play area, and so, if we've had a focus story there will be some props in the role play, and we’ll encourage the retelling of the story. So yeah we do a lot of that and also the (small world play? 30:45) encouraged narratives as well…it's that balance between you know sort of child initiated and adult led learning, but no, we would go and play in the small world, and you know if the children are not focused on something particularly, just would get a little figurine and just say “oh I'm this from the story, and who do you want to…” you know that kind of thing so yeah through through play we do a lot of work on narrative and and try to use the things that we've done in our story work within the play setting as well.

Researcher 2: And then so within the context of narrative, would…So essentially the kind of skill of introducing new referents, new characters and then referring to them with the correct pronouns or knowing to not use a pronoun when there's a new referent that could be ambiguous, those kind of skills, is that something that you notice or that you kind of see in the children or…

Teacher 5: yeah it's something that we… that many children that come to us do, but we do help the children with it as well, when they find it difficult, the hes and hers, yeah he she, his her and just yeah just modeling how those things go together and again, it would be sort of correcting their speech for them, so you’ve got…”she's got his bag “, “oh she's got **her** bag as her goes with the girl cause she’s a she”, you know, that's something that we will model in that way.

Researcher 2: That’s very interesting. And then my ears perked up earlier, with narratives specifically you mentioned play so that is also something that C'm very interested in. I guess, as the first question about that, what proportion of your time would you say is spent in a kind of formal learning setting when you are speaking to the children and what proportion would be more child led?

Teacher 5: Yeah so within the day there are set times which are structured and then set times which are child led, that we call “busy learning” because, you know, I mean it's fine to just call it play, but there's so many connotations around the word play, and especially when you get non early years practitioners that will say “they're just playing”, you know, they're not just playing, they’re never “just playing”, just that's a different meaning, we call it busy learning, because that, you know, takes away from the connotations around that word. It’s absolutely fine and I think children should play and I think there should be much more play throughout the whole of primary school, but again that's a side issue… so within our day in reception as the children first enter the classroom they would be freely choosing the activities that are out, stop for a formal registration which then rolls into a teaching time that would either be a phonics lesson or explicit math lesson, and then it will be time for play based learning…come together against so we’d have within a day there would be be a phonic session and a math session and some other input after lunch usually so that could be that…anything based, topic based, arts based, some kind of adult led, and then other than that it's about getting and spending as long playing as they can, as much child led… and having the adults in the play with them as much as possible.

Researcher 2: We call it guided play, what you call busy learning, yeah. That's exactly what we’re looking at. Would you say that there any specific kind of areas of learning or subjects that you think are better acquired by the children if they're done through this play that's adult…scaffolded by an adult…

Teacher 5: I mean I just think everything is better through play to be honest. I did some supply work and I taught this year 6 class, and it was around…I can't remember the details of it, it was so dry, it was round about the battle of Hastings and it was about the build up to that and it was about the armies and things and the children have got these laminated sources of information that they needed to read and then find the answers from, and I just thought, we could just do this with a… give me a tuff tray, give me some figures, and then you know if you do the ratio and proportion like “right this army is the equivalent of 10 army wide, as this army is the equivalent of 100, let's actually look at that and let's play with that and let's look at the battle formations let's actually make them with the figures”, you know, that kind of thing, so I just think that would have been so much more engaging, so much better, and I think the children would’ve remember it because…I can't even remember the facts on it, you know, you kind of like quickly memorize them to teach them right and then it's gone, because it was just so dull…and I thought the yeah they’re year 6 and I know year 6 aren’t meant to play because we're getting them secondary ready, but I think if we would’ve done that through play it would have been more memorable, I think they would have remembered it, I think there would have been more chance for open discussion as well, because when you're just reading the facts of this is what happened on a laminated sheet that's it, whereas if you've got your figure and they're like, “why did they do that formation”, “why didn't they do this”, you know, and then you're like well let's act out what would happen if they had done it, you know that kind of thing.

Researcher 2: So when you do have these play, these kind of child led activities, how would…would it be a big group? so there's different activities right? How many children generally would be in each activity, how is it organized?

Teacher 5: Yeah it's… at this setting it is free flow, so the children are… there's no sort of maximum minimum number, the children are able to go to the activity and stay and move on as they wish, if there's something we’re particularly working with we’ll kind of pull them in and try and get them engaged and things, but you know you get the classic “can I go and play now?”, which means that they don't want to sit there and do…and learn it in a way that you're trying to explicitly get them to learn it so…yeah no maximum or minimum in that setting, I have previously worked at settings and it just…it wasn't my thing, but it is what they did, but there were signs everywhere which said “four can play here”, “three can play here”, and so on, and I just found the issue with that is instead of actually playing, the children are more engaged by policing it, you know they're standing on the edge of the role play going “you can't come in, because there's four”, you know, and then they aren’t actually playing in the role play because they're too hung up on “well, you can't come in”, and “well you came in last so you need to go”, I just found them more hung up on the numbers, than actually just playing, and you know what, if it can fit in, fine, play!

Researcher 2: That make sense, yeah… removing the logistics, I guess.

Teacher 5: Yeah, and trying to teach the children to make a good independent choice, you’re like “okay, that area looks a bit busy right now, all the chairs are taken, there's not really space to squeeze in, so do you think maybe go do something else, and then come back to that?”, you know, that kind of thing…or if it's that popular let's extend it out onto another table, you know let's shift off this that no one's doing and let's all do it on this table instead.

Researcher 2: Okay. I think that's the end of my questions actually, thank you so much for all your answers, it’s extremely relevant to my… yeah, I mean my research is on experimenting on the value of guided play so, as you can imagine, this is…it's good to hear that teachers who are actually not just looking at it from an academic point of view, but actually living through the teaching, also…

Teacher 5: Yeah, and I think that has been a big shift since the the new curriculum has been introduced, taken away that pressure of being behind the iPad documenting everything, because that used to be one of my biggest frustrations in reception is just like you know a child says something brilliant and you’re like pause, hang on, I need to evidence this, so let me just take a photo and “say that again”, and let me just write down exactly what you’re saying, and you've broken the play, you've lost, you know, you've lost the job, but you had to because had it come to the end of the year, and you haven't got enough evidence for that strand, you know, then…yeah. So I'm really glad that the emphasis is taken away from being behind the iPad watching the play, and you know getting them to re-say their quotes because , you know, “that was brilliant” you know, kind of thing, and it is more on… play with them, be with them, model, that kind of thing.

Researcher 1: And that's the…is that the kinda newer version of the early years foundation stage that came in, was it last year? It was kind of phased i'm trying to remember…

Teacher 5: Yes, so this year it's been properly in, the year before it was early adopters so it was optional.

Researcher 1: Yeah, well I've come across that in a kind of personal capacity with my daughter being at nursery or, you know, pre-school, they’re telling me about, you know, the shift.

Teacher 5: Yeah it's just relabelled some things and it's got rid of exceeding criteria, and so the emphasis is on getting children to the expected level and that's your priority, not you know your quota has to be above you, have to have this many above… it's getting as many children as you can to the expected level by the end of reception which, no, I don't disagree with, you know…so working with all the children the new goal is, if they're there great let's now have a real focus on the ones who aren't there and let's get as many children up to where they should be as possible.

Researcher 1: yeah okay…it sounds like a lot of fun being in your class!

Teacher 5: Thank you.

Elspeth Wilson: Do you have any questions for us?

Teacher 5: No, I don't think so.

**Teacher 6**

Researcher 1: And I want you to just start by telling us a little bit about like your setting so you know: state or private, what age group you teach, and that kind of thing just to kind of set the scene.

Teacher6: Okay, so at the moment, I am in a small village primary school in [county – anonymised] and we have quite a mixed intake - families from lots of different backgrounds within our setting; various high and low income families. We have a slightly higher than average number of SEN children in our school and quite a reasonable proportion of pupil premium children in our school as well. I currently teaching year five and six.

Since I've been working at the school I've mainly taught year five and six, but we are a school that runs from reception all the way through to year six - we're a through school. We have an early years setting attached to us, like a sort of nursery setting, preschool setting attached to us at the far end, although they are separate run unit, they are kind of attached to us informally. So we have that lovely through traffic of children that we know right from nursery all the way through until they year six and they transition to secondary school.

Researcher 1: Have you always taught that older Key Stage 2 level?

Teacher 6: No I've actually taught every year level from reception, actually I've actually taught all the way through from nursery age to A levels.

Researcher 1: wow.

Teacher 6: At various points in my career so I'm well traveled, well seasoned. I am definitely not a natural early years teacher - I don't mind doing it i'm happy to do it, but it's not something that is my favorite area, and there are other teachers who are much better at it than I am. So I'd rather leave it to them. I think you have to have a certain skill set to work really well with early years children.

I probably prefer middle middle grade middle years age group so. And I mean anywhere in key stage two is a good place for me, but I've taught quite a lot in year four through to about year eight or nine. And that's probably my preferred setting. But I do as an English specialist I prefer I do enjoy teaching older children, so I've really enjoyed the GCSE and A Level English teaching I've done because it allows me to be back in my first subject which is really lovely so.

Researcher 1: yeah well feel free as I'm asking questions to kind of answer based on any of your kind of your primary experience, if you do want to remember back to when you were in key stage one, then feel free to talk about that, because some of it can be maybe more relevant to that.

Yeah but it's up to you. Okay so I'll dive straight in, because we will have to finish promptly at half past because we've got someone else.

So the National Curriculum, I think key stage one and stage two, says that children should learn to make inferences based on what people say and do, when they're reading or being read to - something along those lines. And I wonder what springs to mind when you hear that: what kind of inferences do you think of?

Teacher 6: Where I'm currently teaching, so in upper key stage 2, inference is very much sort of considered a higher order skill. It's for children who we tend to have gone through a retrieval stage of information when having a text read to them or reading a text themselves. So that's sort of that entry level is being able to retrieve information directly from a page. And then thinking more about building on word understanding and word usage, word retrieval and then thinking also about then inference on top of that, and with the inference we use we're thinking about that level. It's more being given little clues within the text for them to unpick the finer details, so... I'm trying to think of a particularly good example... so... so a text might say something like: 'The boy move swiftly through the graveyard through the pitch black'. You know, and then they might need to be to be able to pull from that, it was it was nighttime. And now that's a really simplistic example but it's that sort of level, you know that's that's kind of your entry level inference in key stage two, when you're kind of being able to take words that they sort of are sort of familiar with, and then, in that context, be able to understand that you know it's the time of night, it's nighttime and so on, therefore, he might need a torch to make his way through the pitch black and and so on. But there are lots of children who really struggle with 'pitch black'. They wouldn't know that it meant night - so they're not literally they're not literally seeing 'it was, it was a black night', it was a dark night they wouldn't be able to tell you that it was looking for nighttime.

Researcher 1: Building on that, how do you incorporate teaching those kind of inferences in your classroom?

Teacher 6: It's really taking every opportunity, so we, we have a kind of ring fenced reading time with our children every day, where we read a book that is sort of a high level for their age bracket. We read one to them every single day, at the end of the day, and that's part of our practice so that we have an opportunity to expose all children to quality text within age appropriate, but at higher end age appropriate, and then talk about the language as we read along with them. That's part of it part of our writing program: we use text to inspire our writing approaches and then within that thinking about how authors play with language, use language to set a scene, or to develop a character, the nature of a character, or you know a character's particular manner or traits, that sort of thing. And we do a lot of unpicking of characters: so we've been looking 'Who let the gods out?' by Maz Evans and there were lots of really beautiful character descriptions in there, and there's lots of little nuggets of character detail that are sort of sunk into the character descriptions - the children really have to pull it out and it's all through the discussion around what's been read and 'what does that word mean?' and 'how do you know...?' so 'what does it suggest?' and it's it's all of that a lot of discussion based work. Things like when we have, so we do, you know, standalone reading comprehension because sadly at this end of the school our children have year 6 SATS testing, and part of that testing is reading comprehension. Within that inferences as a big chunk of the higher order skill questions - the ones that are worth three marks for the children, the ones that when you get to GCSE you get the big chunky sections to work on - and those are quite challenging for the children to be able to not only identify the point that's trying to be made, identifying the words that have lead them to come to that conclusion, but then having to evidence their thinking. So 'why have you been able to infer that from the text?' so 'What is it about that particular word or that particular phrase that has allowed you to do that?' So that's built into our reading skills work that we do. Even even really I suppose in we do our grammar work as well sort of sentence level structure work. We're thinking about the nature of the sentences were writing and what we're trying to convey through those sentence structures; what we want our readers to read from our writing and why we choose certain structures. And it's a lot of it there.

Researcher 1: And, are there any kind of specific methods or resources you use - sounds like there's a lot of them just question and discussion and things, but if anything like specific that you use in teaching.

Teacher 6: Well it's a lot of lot of things that sort of built up over time. We tend to ...we've got various materials we use as kind of intervention materials and stuff for that so there's a thing called Shine materials from a company called Rising Stars they've got specific packs for various strands in the reading curriculum to do interventions for children who are struggling with retrieval and word level and inference studies. So we have you some of their materials for intervention to support children.

A lot of it comes down to oral questioning and discussion. I use a lot of materials that I create myself that come from texts: so books that I know well, pulling excerpts from those books and creating questions around it that challenge the children's inference. Some things come out kind of holistically I would say when we're teaching outside of core areas: where we're teaching the humanities - we're thinking about our history and our geography and our RE learning. Sometimes there's obviously with our readers a lot of stories that are tied into various religions and world religions and so, for example, recently we've been doing stories from Judaism and that's been quite interesting and sort of allowing the children to almost use their reading comprehension skills, their inference skills, their retrieval skills to be able to interact with the story, make predictions about what what they think could happen next to these characters, within these Bible stories in this case. It's nice to see them being able to transfer those skills across. But it a lot of it comes down to oral questioning, discussions, and sort of traditional written out comprehension style questioning. We do a lot of text highlighting and annotation together: so asking the children, 'can you find evidence to back up statements?' we make statements about a character or statements about a place, 'can you find any evidence that might back that up'? Which again, on one level for some children, it can just be simple retrieval from the text - so looking for specific words; for children who are more capable of inference at a high level they are then digging into the text and finding out sort of almost hidden nuggets; having to read between read between the lines, I think, and understand where we're going with that. So those would be the main things we do.

Researcher 1: Thank you it's really interesting I was just wondering - I'm thinking back to when you've been in Key Stage 1 or Early Years - are any of these things you've described something you would have done there, as well, or not so much, or something different?

Teacher 6: Not quite in the same way, but then we did I did a lot of this a while ago now, but I did a lot of things like: we had feely bags and things like that so almost setting the scene if you're going to read a book with children. And having the children kind of put their hands into the feely bag and describe what they're feeling inside the bag: 'what do you think it could be? And then pulling out the object: 'what might this you know what might this tell us about a character in our story?' and getting them to think about you know, why a character might carry a shovel or you know, whatever it happens to be; 'what might be the purpose for it?', 'what does this tell us?' And then, you know, the children might you say, you know, "is it something to do with their job?", ;what kind of job might they have?' or 'could it be to do with something they're doing as a hobby or pastime - what might they do?' And it's getting them to kind of use their own knowledge of the world and apply it to your questioning - tends to be a bit more visual. I tend to do it a bit more visually I think probably the key stage one. We do a bit of it in key stage 2 obviously but slightly different structure, because obviously we're unfortunately having to train them to answer to specific test style questions more than more open questioning.

Researcher 1: I'm going to share my screen with you and show you some examples of language that might require inference to understand. Here are some sentences and they are a bit out of the blue, which might require inference. Now don't worry too much about the kind of words in green down the side, these are the technical linguistic terms. Some of them you might have heard of like metaphor, which is why I put them there in case they are something you were comfortable with using, but some of them are probably just a bit geeky so just ignore them.

And what be really interesting if you could maybe just kind of talk through them and also, I can talk with you about them, because some of them might not be obvious, out of context exactly what we're getting out, and think about: Is this the kind of inference that you would be teaching or kind of talking about with the children? Or is it not like, maybe, you think it would be too easy or too hard for them. Just to give your response, whether this would be something that you'd kind of pick up in looking at it.

Teacher 6: So if you take the first sentence, 'it snowed in the night, the tree wore a white hat': that's sort of the sort of language, we might pick up if we were doing sort of poetry, for example, and thinking about the language sort of creating the the images that are created, perhaps within I mean description writing, but also within poetry. And you know, do do you actually need both parts of it? you can make suggestions and you know if you just had 'the tree wore a white hat'. So it would you know, on a literal level some children might say, well there's a hat stuck in a tree - they might. You hope they might dig into that and think about whether you know, is it that it snowed or what else might make it white - have we got low cloud level, and you know you could have those discussions with children, whether it's poetry or description or something like that.

Researcher 1: So imagine a sort of scene where there might be like several different cups and you have to identify verbally which one it is: you know it's the big blue cup, not the little blue cup, or not the red cup.

Teacher 6: Some of our children with special needs, children who have particularly who have issues with language and language acquisition, that's the sort of thing we have to be very, we have to be very careful how we speak to them. And if we give them instructions for something, having to be very, very specific like that: so pick up the big blue cup as as opposed to any small or - you know there's small cup or a cup that is sort of blue but could be green, you know. And there are other children where actually if we give too much detail - where that big blue cup - that would actually stop some of our children being able to follow the command, even though it's simple, because there's too much, then for them to think about - they can't process. Which is - that's for me that something that I would be probably more likely to say to a key stage one early years group: being that specific. We don't I don't tend to have to speak that specifically or use that sort of language with my older children, they tend to pick up on things more readily, they're more able to use clues in their environment, I think. Maybe they're more experienced, perhaps because they're older.

And the kind of thing actually: 'Do you want to play football this evening?' and response 'I've got a piano lesson' that's a sort of thing, the kind of text you might get in a piece of comprehension at key stage 2 SATS level. If you have character names attached to those sort of sections of speech: now why did did did Kevin want to play football? And then hopefully getting a response of: he might have wanted to play football, but he had a piano lesson. It's this that kind of unpicking I think, without it having to be said, "no I've got you.. no I can't play... no I'd like to play football but I can't play it, I have a piano lesson". But it's them unpicking the bits that's not being said. But that's the sort of expectation within our comprehension at key stage 2; they can literally read what's not there and use it to answer.

'He finished his book yeah again'. That's an interesting one for me. We have some children who - it's a term that I don't it's not really used so much anymore, we don't we tend to refer to 'global delay' - there isn't really an appropriate term to use instead of that anymore. But for children who are not really working anywhere close to their age related in school terms, academic terms. It would be: We have to be very, very clear with children, say, have you finished your book, you know; then: get a response. Then the next question: 'do you think you need to get a new book? or 'do you need a new book?', because they would not understand, they would not be able to unpick: if you have finished your book what to do next, they wouldn't know. Your average key stage 2 child - I don't really like the term average but you know that age related within their Year level - would know that that's you know if I finished my book, I need to go and exchange it. But for children who sometimes have additional needs, that underlying inference of what to do next isn't there.

Researcher 1: What about the idea that if you say you finish something, it kind of assumes that you've actually started it as well?

Teacher 6: Yeah I would, I would like to think that most of them would know that, but actually I wouldn't be convinced that some of ours that are not within age-related would know that.

Researcher 1: mm hmm. The next one and we've decided is bit of a tricky example: so the idea of metonymy is that you can use one term to refer to something else. So a classic one is something like: "number 10 have announced that..." or "the White House says..." You refer to the President or refer to the Prime Minister. So here, the idea was that: 'the fire alarm went off today; it was the blue classroom again'. 'The blue classroom' referring actually to somebody in…

Teacher 6: ...blue classroom who set off the alarm. And again that's the sort of inference discussion level we would have when - we have been doing it with this text actually - suggestions that are made about something but indirectly. So, yes, we definitely would use that. It was something I think again those working within their sort of age-related can get it and understand it through the discussion. It might not come straight away for everyone. But it's definitely something that we would expose the children to that sort of language and phrasing of things.

Researcher 1: So this is an example of where you have to match up the pronouns; so you have to work out which 'he' is John and which 'Jack'.

Teacher 6: It's funny it's the kind of thing that will actually pop up in a grammar punctuation and spelling test. So something that would be really tricky from a point of view of language level and inference level, comprehension, but would actually appear more likely on testing for children having to use the appropriate pronoun. So, again, I think I think you'd have some that would struggle with it - in terms of connecting appropriate pronouns and understanding, who was who. I think the approach we would go, we would use there is reading it through several times: you know reading it to yourself. Something we - one of the strategies we use we kind of do an earmuff thing: the children can always hear themselves when they say it, they hear it in their own heads. So you hear somebody saying, it you hear yourself saying it, your friends say it, and sometimes that helps to connect the dots by hearing it from other people, but also from yourself.

'John gave a book he thought he'd like it.'

That's interesting isn't it those two side by side, though.

Researcher 1: with the second example, you can make an inference as to how the sentences connect - like kind of imagining the 'because'.

Teacher 6: Absolutely, I think that'd be really interesting and I think, though, that the children would actually have a lot of discussion around that one, and what what's intended. That would lead to a lot of interesting conversations between the children about what the intention was, and I could imagine children debating and trying to debate what was trying to be in what was inferred and so on.

'Finally, arrived from the card or heard the gulls and felt the salt spray on their faces'.

So, again, I mean I would I would expect to see my children in year six but years five and six: they should be able to read that series of two sentences, at the end there and understand that they you know 'they', whoever 'they' are, have arrived at probably a holiday destination or the beach or so on. I think they would be able to unpick that maybe because we are where we are we're not so far from seaside locations, perhaps here so draw on their own experiences, whether it's from holidays or you know days out and so on. And I think being able to draw on their own experiences sometimes really helps with it helps with inference.

Researcher 1: Thank you that's really interesting I've just got a couple of things before I pass on to Researcher 2.

So firstly do you feel that learning to make inferences is an important to unimportant part of learning to read or communication more generally?

Teacher 6: In terms of the initial skill of learning to read I don't think it is, in terms of that initial skill, other than in the sense of when we start our early years children reading they have wordless books so actually for them it's observing the pictures and by seeing what's in the pictures drawing on their own experiences and what they see in front of them, they create the story, they tell the story. And so they're having to infer from what's on the page, I suppose what's happening. But in terms of the skill of it then drawing it from a written text themselves, I think that becomes a more important skill as they become older, to be able to access highrt level texts: texts that are longer, more detailed more complex, in terms of character and setting and plot. I do think they need it, otherwise a lot of the plots lost. I mean take again - sorry to keep using it, but take this text again as an example - you know it's based on to do with Greek mythology and so to have an underlying knowledge of Greek mythology and the interactions of the gods and goddesses and the stories that lie behind those gods and goddesses, is massively helpful for children to be able to understand particularly the humor within the book and to really pick up and probably enjoy the book at its intended level. So at the moment where we're reading it to a really mixed ability sort of age bracket we've got some children who are really understanding it, because they come to it with the history knowledge, their own experiences and they're able to infer at quite a high level, and they understand the humor behind it, and you know the children because they're laughing in all the right places; they get all the little underlying bits in the story, in the text. And you know they're sort of laughing with the adults in the room. And then the children who aren't quite there yet - they're enjoying the story; they understand the basic level of plot to it, and the basic level of the characters and what those characters are like; but they're not picking up more the deeper intended connections I don't think. So they missed the kind of intended humour behind things they're getting more of the sort of slapstick level humor and not getting that deeper sort of, I suppose, more more witty and more wordplay level of humor within the text. And so I think it becomes increasingly important.

It's very important in their social interaction as well, actually. Then I think we have we have children, we have quite a lot of autistic children who we work with at the moment, and for them it's knowing to speak and be very specific and try not to hint at things or allude to things to have to say very, very explicitly that... you know it's like that that statement about the big blue Cup. So "please go and sit in the second chair", you know, having to be that explicit so that they know not go sit in a chair, because it could literally be any chair in the in the school for some of our children. So I think it may be different different sorts of inference perhaps at different levels, sort of based on my experience. You might hear differently, I suspect, from an early years teacher: they might talk about more about the the inference sort of picture level, and so on.

Researcher 1: Can I just pick up on what you said right at the beginning, that you think it's less important at the beginning stages of learning to read - and why do you think that is the case?

Teacher 6: I think, initially, for, in terms of their actual reading: So yes, they are like I said, with the with the word list books, they do need to look at the picture, but when they actually start getting into their phonic learning and breaking down the words on a page into the sounds they can say them, their focus becomes - in that in that phase of their learning - it's become becomes more about learning to read the words on the page. And once they've got that it's, "once I've read the words, then I need to go back and read almost reread them to understand what the words mean", because it's that shift of skill. And all the children right from early years all the way through you know even we're talking up at university, Higher Education, if you give someone an image there are lots of opportunities to infer things from an image at any level you're working at. So in that sense it's, it is important early on, but when you're thinking about them actually developing the skill of reading the words on the page, they might be able to guess words that come next because of their experiences and what they can see in the picture, but then we also know that children that get into a habit of guessing words as they learn to read, they don't read fluently. Because they're they're filling in words that may not actually be there, and therefore they create their own meaning around what's on the page, as opposed to the actual intended meaning of what's on the page. So I think there's a there's a sort of a starting importance of inference, it sort of phases off a little bit while they're actually gaining the the act of reading, the skill of reading the words. But I think that then inference then builds up again, and again and again as they come through we kind of build up that level from more of that word level retrieval up into the higher order skills - in primary, anyway, I would say.

Researcher 1: Thank you, and finally, is there anything you feel with help with teaching inferencing? That you don't have at the moment or not?

Teacher 6: um I mean I think banks of resources that are specific: you know you there's lots of little bits out here, here and there, but specific tools and actually a system that almost builds up those inference skills, because there's there are lots of resources out there, but it's finding the ones that are appropriate for your children at their stage and phase. So things that are actually grouped for age and phase or skill ability that is always incredibly helpful for teachers to have things they can actually draw on, and then use their own skills in the classroom with those resources that's was incredibly helpful thing. Otherwise we're making it always ourselves and that's very labor intensive.

Researcher 1: Thank you, just in the few minutes we've got left I'll pass over to Researcher 2

Researcher 2: I feel like we've covered most of it very thoroughly. I think I’m just gonna ask a few little follow up questions, and things that I was wondering about. So I have first a little question about… so you were mentioning, for the one in Elspeth’s list that was “anaphora resolution”, so that was the sentence, where the pronouns had to be matched.

Teacher 6: mmhmm

Researcher 2: So you were mentioning that it was tested based on comprehension if I'm not mistaken, but is there also an element of… within maybe some kind of creation of narrative or storytelling, something like that, is there some kind of focus on introducing and then… introducing reference in a certain way…characters… or even using correct pronouns.

Teacher 6: Absolutely. Yeah, so when we teach writing there's an aspect of writing in the curriculum that we call cohesion, where the children are encouraged to state, as you said, a character name, or a location, even, you know, sort of abstract nouns things like that, but then later on reference them by a pronoun in their place and that's part of the kind of cohesion that's expected within key stage 2 writing so being able to link… for children to be able to write that character let's say by name and then write them by pronoun later within the same paragraph or potentially within… later within the same story, but many paragraphs later, and being able to interchange between them at regular intervals, to keep that connection going and the cohesion that flows through the story. So it's something we definitely do teach through writing but it's actually something that's tested from their grammar/punctuation/spelling curriculum, that use of exchanging nouns for pronouns.

Researcher 2: And then… looking at the early years…because I saw you mentioned at some point the use of wordless books and kind of picture books.

Teacher 6: Yeah.

Researcher 2: and then little little narratives created I'm assuming orally based on that, and these (?), would it at all…would you have also this use of…kind of… pronouns at all and…

Teacher 6: yeah absolutely so they… in the early years and into year one in primary school a lot of their vocabulary building and their word building that they do as part of their reading and their writing and their language work builds on the use of pronouns. They have to read them, write them, obviously spell them and and so on, so that definitely definitely appears for lot of the children, and they would be encouraged to use their pronouns.

Researcher 2: Okay, thank you, and then I think my last question is a bit separate, it's a bit more of a general question on the way your time as a teacher is organized so, how much, and this applies to what you're doing now, with the older children and also to earlier years, so how much of your time, would you say is spent speaking with the children sitting and listening and you speaking, in a kind of formal learning way, and how much of your time is maybe group work, pair work, kind of child led?

Teacher 6: I think in terms of… in early years and lower primary we have something in place called continuous provision where there's learning based activities are set up around the room for the children, the children elect which bits they do, when…within those areas, some of them are… or there was an adult near those areas, so they have opportunities to interact with the children orally both formally and informally depending if it's an adult run section, or whether it's a independent section, and the teachers in those areas rotate through those areas in those groups over the course of a day or a few days or a week to make sure that they've had interactions with all the children both formally and informally. In… when you start getting up to year 2 and the transition into key stage 2 so into year three and upwards there's a lot more formal sitting at tables, less… you know, we don't…in year 2 continued provision is almost gone, it's not entirely gone, but it's almost gone and you're in a much more formal classroom situation. Generally speaking, but not exactly because I don't think any teachers teach in this exact way all the time that but um, you know you… usually you'll start a session with some sort of input and it could be as short as a couple of minutes to get them going on something, it could equally be a little bit longer depending on the age frame…age phase, it might be, you know much… the younger they are, the shorter the verbal input before they do an activity, because they don't have the same attention span for sitting and listening, and so we try and sort of keep those delivery shorter, for the most part, and for where I am right now, year five and six, we do tend to do an initial initial introduction, very brief and get into a kind of a warm up activity or starter depending on whatever the lesson is, but something that gets the children involved and engaged straightaway, bit of a skill checks sort of thing, then we might go through and mark something or discuss what they've done or have feedback from them so they might have a discussion moment with us and give verbal feedback, we might then have a little, you know, discussion to build up for the next activity, again that might involve us leading something or the children, taking turns, it… that could be an independent task where it's a quiet activity, and then we come back and feedback (?0:39:03) on that one at the end of the lesson, or it could be a group work activity where the children are discussing and then the adults in the room will rotate around those groups to check in and make sure the children are on task and kind of feed into the dialogue to sometimes…extend the the course of the dialogue that's happening within those groups or sometimes to boost the nature of the dialogue to send it in the direction we're hoping that lesson goes in…Yeah so it kind of depends, really, I hope that gives you…

Researcher 2: That’s very, very thorough, very helpful. Um, so we have, you know, two minutes left, if you have any questions for us that you would like to ask.

Teacher 6: I'm just intrigued: what are you hoping kind of what what's your outcome? what are you aiming for with this project? i'm just intrigued as I really enjoy language and my head sent your sort of overview and so on, to me, and he said, I think this might be up your street! So...

Researcher 1: yeah So this is sort of a bit of a stepping stone in a way. We're interested - and what we've previously researched and know about - is how children learn to make inferences, in conversation - especially when they're a bit younger, so 3-6, although obviously they continue to improve you know throughout childhood. So all the inferences were looking at: irony, sarcasm, metaphor, and things. And then we just became aware that there's also a lot of research on reading or inferences within reading, which tend to focus on those slightly different kind of inferences, like the global coherence inference, for example. And on the research side those whole two areas of the research don't really talk to each other. And that was the first thing we did was try and bring those communities together a bit. And then the next thing was well: This is something that has to be taught in the classroom, and what are teachers actually doing? And that didn't seem to be any obvious or easy answers so actually you know that we just find out what what the teachers doing, how do they understand you know, there are so many different type of inference; what are they actually doing? do they feel well supported or not? so this is a sort of initial step that we are talking to quite a small group of teachers and really to get a sense of - a little bit of a sense of - what's happening and also what might be helpful and will write this up. Hopefully, in like well, maybe a couple of things like more of a kind of academic article, but then also maybe some more teacher / facing practitioner facing you know, like in Impact, for example. And then we'll see what happens from there really. Others can perhaps take it forward. Ultimately I think there's loads of really interesting questions as to how these things are best taught, I think: genuinely we actually don't know yet: there are some things that are really well evidenced, like, for example, we know systematic phonics is the best way to teach reading, we know that some interventions are really good - like the NELI you might have heard of. And so, but I don't think when we get down to this kind of level of teaching inferences; we don't know whether: should we be doing it, should we just be focusing on vocab and background knowledge - what's the best way of teaching inferences? which ones to focus on? There's not that much evidence as far as I know. And so that's what we'd love to aim at.

Teacher 6: That's interesting: so I don't think I think a lot of class teacher, maybe, maybe probably primary class teachers probably wouldn't know that there's a range of inferences out there. I don't think if you haven't had a background in linguistics perhaps and or language in any way I don't perhaps they wouldn't know because it's definitely not part of training. That's an interesting thought perhaps it's not it's not specifically explicitly taught for teacher training.

Researcher 1: that's really good to know, thank you. And I'm aware, this is a tiny part of everything that you have to teach as a primary school teacher yeah.

Teacher 6: It is but higher order skills are important, so.

**Teacher 7**

Researcher 1: I wonder whether we could just start - if you can just give a bit of a sense of you're setting - private or state school - the year you teach or have you taught in previously.

Teacher7: so I work at [name anonymised] primary school it's I think the biggest school in [town anonymised]; three form-entry, about 600 children; And below the national average on pupil premium levels but high EAL. I think most years we end up with about 30 different languages spoken something like that. I teach year six; I teach them everything, and if you take my class this year, the majority of children at least two thirds of the class are bilingual. Yeah it's a school that does does well kind of academically, in its SATS results, and amazingly this year, I mean we just got through the stage 2 SATS results and despite covid we actually pretty much got got what we usually got, so apart from 2019 which was our I think like we're talking like one or 2% difference in scores, we did better than all the other years before that so yeah that is a I guess a cohort: that the children work very hard, they also have supportive families, to help them and we work hard with them and they yes there's kind of an expectation that they will do very well - on teachers as well with that.

Researcher 1: Have you always taught year six?

Teacher 7: No, no, and in fact next year I'll be teaching year one so this is the end of the year six era, hopefully for a while. Having said all that about SATS, because it is yeah not all about SATS. And yeah I've done three years in year six, and before that it was year three for two years, and before that I taught English as a foreign language abroad for a few years, and so I was working with kids of all different ages and adults and that's how I got into teaching basically.

Researcher 1: Fantastic well, I mean feel free to draw on your experiences in year three, as well as year six in the discussion, if you weren't, although I'm sure year six is obviously much more fresh in your mind what you're doing at the moment, but if anything pops in to your mind from what was it like in year three or from your colleagues, you know feel free to kind of chip that in as well.

So you get to get started, I think that both the key stage one and stage two curricula say that children should learn to be able to make inferences based on what people say and do when they're reading or being read to. And I wonder when you hear that or when you read it, what kind of inferences spring to mind? what kind of inferences do you think of?

Teacher 7: yeah I think I always describe inferring as using clues to suggest what's what else is going on. So I mean both in year three and in year six I guess it's been about inferring what characters are really thinking - that things that the author might not actually be telling you but that are suggested. And characters' emotions and inferring ... I mean, I guess, this is where there is some overlap with prediction, inferring if there's something specially in year six, something sort of bad underlying, some sort of other themes, a bit forbidding might be coming up.

Yeah what else? And maybe sometimes inferring what the narrator thinks of a character or wants us to think - there's that too. Yeah I think these are the main ones.

Researcher 1: Thank you. And and how do you incorporate this inferring into your teaching and what's your experience of doing that in the classroom?

Teacher 7: Okay well in year six we use a program called Bug Club - I don't know if you've heard of it - and they make these kind of guided reading comprehension books and we're using them throughout year six. And basically we would reach different text types and to listen to the audio version and then over the course of the week, we do different activities in a workbook about it. So some of it would be like the vocabulary work, and then there'd be sort of almost kind of pre-teaching different ideas that are about to come up in the text, and then there would be comprehension questions. So within those comprehension questions after they've read that week's chapter or something there would be some inference type questions. And for teaching it: well, I guess at the start of the year I was modeling - we would we would talk through these questions, a bit more before they had to go and look for or highlight some of the evidence in the text we might answer with, and then I might model how to write it on the board. As the year went on, it was more about: they knew what the steps were and they would do it, and then we would talk it through afterwards, they get feedback that way. But I guess, also in terms of teaching, I had sentence stems up and which sort of help them to structure those things. So they would say something like, 'the writer says says blah blah blah, which suggests that...' or 'which implies that....' So I encourage them to use those and but also to get into a habit of using those to help them with SATS questions because to get those big three mark questions right, they need to learn to structure answers like that and yeah to give points and to give evidence.

And and but also we did guided reading in working in groups where we were reading chapter books and and, in sort of a more informal way, maybe we'd sit together and like five or six children and the others would be working on some other reading activities and and just as things came up, I would say 'Oh, what do you think this suggests?' or 'what's implied by this?', or 'what can you infer?' yeah we'd just talk about it.

I guess in Year three how we taught it: we did a lot more work with picture books, not just picture books, but there are some great amazing picture books out there. So that would come up, we had - I was working at a different school at that time – [name anonymised] primary school - we had every half term a different book. So there is one - I mean 'Amazing Grace' is very famous - but there's one about Einstein, a biography - I can't remember what it's called now, a picture book. But yeah, so we discussed what you could infer from the pictures and the illustrations but we'd also do a lot of drama like freeze frames and role plays and getting into character. So, they would do that, first, and then we then we might talk about these kind of questions after, when they'd sort of, I guess, immersed themselves in a little bit more. And yeah and I guess it's really just looking for opportunities for inference everywhere so even at the end of the day when we would read stories, in year three and in year six, a different story, you know and yeah just asking getting getting the kids to just be aware, like tell me what yeah, 'what do you think is going to happen? 'Is anyone else thinking what I'm thinking?' 'Oh, I wonder....' you know.

Researcher 1: Okay, thank you. You mentioned one specific kind of resource and methods that you've used um yeah I think quite extensively. Is there anything else you'd like to mention? there may not be because you've talked about it.

Teacher 7: I mean some of the books, like this 'Five Children on the Western Front' come with a resource which I should have used but didn't get into using it in the end because we sort of ran out of time - it was on my desk but I think I just chucked it out - yeah we do have some books that accompany these ones. I mean we also use, what would it be... I think it's like Oxford Owl or something: they have these sort of assessment grids, which have the different things that children are supposed to be able to do, and that would guide - it's not a resource as such -, but it would guide what we're teaching and asking of them. So have these kind of tick sheets and then whenever you're working with a group, you would try to cover those objectives or watch out for them in the chapter you're reading, opportunities. But as for other resources. Oh, I see yeah we have: we've used the Big Write resources, I don't know if you've heard of them. I think it's another, I think they're also published by Oxford Owl. So we did this unit of work in year six about Goldilocks and the Three Bears. The idea was that Goldilocks is wrongly framed and her granddaughter was trying to clear her name, and these resources yeah were made by The Big Write , but they're actually very good. We don't use very much Big Write stuff, but this is something that we've kept and they have all these evidence cards for all different characters in the story to sort through and a lot of them sort of have flaws in them, but they only realize by kind of looking for like evidence that contradicts each other and things. And so there's quite a lot of inference going on there, like what can you infer: Goldilocks cannot be trusted because she was seen at this time by Little Red Riding Hood; or she cannot be trusted because she had a motive, or whatever so yeah that's another way that we taught inference, I guess. And that was the children had all these cards to investigate and an evidence sheet and they were yeah went through it and we just sort of compiling, so who the source, or what the source was, a summary of the evidence and then what could be inferred from that. And then in the end they yeah wrote this formal evidence report to clear Goldilocks' name to the judge and and that went into one of their kind of SATS portfolio pieces of writing so yeah, Big Write I guess.

Researcher 1: Okay, thank you I'm going to share my screen and show you some kind of sentences which might require an inference. And what would be really good is if you can maybe just kind of go through them and talk about whether this is the kind of thing that you would teach or bring up when you're working with text in the class or, perhaps, where you think it is something you wouldn't do because you assume the children know it, or you know you wouldn't notice it yourself or it would be too hard for them. You know just sort of your reaction. And some of them I might comment on a bit because it's a bit tricky when they are out of context and to necessarily see what I was getting at. Don't worry too much about the green labels - those are the kind of technical terms, and I put in there, because some of them like metaphor, you know. But some of them are quite just you know technical terms, so don't worry too much about, just in case they're helpful and so yeah I don't know if you'd be happy, just to talk through your reaction to them.

So take take the first one: it's an example of a metaphor. So is a metaphor something that you'd teach or comment on...?

Teacher 7: Okay yeah so absolutely, and I mean in year three they learn about metaphor already learned about and know about metaphors; I did that with, and with the year sixes I kind of expand. And they already know about similes in year three, so and yeah different types of personification, of figurative language sorry, includings things like personification, and so I guess we'll talk about personification in that as well, the tree wearing a hat. And the effects of the writer's choice of language on the reader: why did, why did they say it? it sounds a bit kind of funny doesn't it... and yeah

Next one: pick up the big blue cup.

Researcher 1: here imagine the idea of reference is like referring to an object. If someone can identify it: so you know, imagine there are several different cups, and you need to say you know pick up a blue cup rather than big red cup or the little blue cup, or something like that.

Teacher 7: So, I guess, we talk about expanded noun phrases and things like that, being specific, and I mean there's a big focus on SPAG - spelling punctuation and grammar - in year six so we talk about determiners, the difference between 'the' and 'a' and 'an' what that means. But I don't really know whether we'd go beyond that or whether it says much else yeah.

And I suppose we'd talk about maybe how that would be an imperative: what is the tone of that? instruction and and any punctuation that would be in that and what that does for the tone of it, whether it's a question or full stock or an exclamation mark would change the meaning.

Researcher 1: yeah. What about the next one: 'do you want to play football this evening? I've got a piano lesson.'

Teacher 7: I guess if we saw those together in a text, we'd talk about, and maybe is that the answer you would expect to that question? and why is that? what What would you have expected? and why do you think they want it that way? what does it suggest? did he not want to play football? and yeah.

Researcher 1: so yeah you'd maybe talk about yeah what yeah what they mean, they didn't give a direct answer to the question but maybe saying 'no I can't'.

Teacher 7: Yeah what did they really mean? What are they really saying by avoiding answering that?

And I think yeah we'd probably talk about: has anyone else ever done that? and we'd talk about yeah how they avoid answering questions or something you know. what them yeah when they answer in a way that doesn't answer question what are they actually up to? like with their parents, you know have they tidied their room yet, and then you give a different answer about something else, what's that about?

Researcher 1: The next one is quite subtle: 'He finished his book' kind of presupposes that he's started and read the book.

Teacher 7: And so, in terms of what what would I look at something like that, with the kids and say what can we draw out from this?

Researcher 1: yeah maybe teach explicitly something about that kind of extra meaning.

Teacher 7: yeah I mean we haven't but that's interesting but I think if I were to show this to my class and say: 'From reading this what, what can you tell me about him and his book?' I think they would be able to say, but I guess that we don't take some sentences like that alone; they will always be part of a larger text yeah.

Researcher 1: Yes, I'm trying to give succinct examples but that no it's okay but it's not really how inferences work so it's a bit tricky.

Teacher 7: yeah I think they would they would be able to.

Researcher 1: it's probably something more for a younger age.The next one we've decided is actually not a great example of metonymy. And so there are kind of classic examples of metonymy are things like where you say: 'Number 10 has announced today that...' where number 10 refers to Boris Johnson. Or 'the White House has said that...' , but it refers to the president of the United States. So in this one the idea is that: 'the fire alarm went off today. It was the blue classroom again'. The blue classroom actually refers to somebody or people in the classroom that caused the fire. You're a you're using like a related thing, like a room to refer to a person.

Teacher 7: yeah we don't teach that but um I imagine my class would like to learning about that, yes, if that were kind of on the curriculum oh yeah... although now I won't be teaching them but yeah.

Researcher 1: yeah and then and the next one is more about matching up the pronouns so: John gave Jack a book because he thought he'd like it'. Which 'it' goes with John and which 'it' with Jack?

Teacher 7: We do talk about things like that and about clarity in writing and yeah. But we probably do it more in the context of teaching SPAG and grammar. So sort of giving a text where the pronouns are all mixed up and asking them to rewrite it, and then talking about different ways to achieve the clarity.

Researcher 1: What about: 'John gave Jack a book. He thought he'd like it.? so here...

Teacher 7: The link.

Researcher 1: Between yeah exactly.

Teacher 7: Again, we would talk about this, but that'll be more in the context of writing. So when modeling teaching writing, which very often anyway comes out of the text they're reading, in response to what they read, I'd been saying to them oh what punctuation can I use, or what conjunction can I use to link these? and we talk about semi colons or would it be better to have a colon there? and why because one causes the other yeah.

I guess sometimes when we yeah: flip side of that is that sometimes when we're reading, if I've got the book under a visualiser or they've got a copy of it, because we're doing some work on a particular chapter of a text, I might say to them, 'why has the author used a semi colon there?' and they can tell me it's because the clauses are linked, and sometimes it is causal yeah.

Researcher 1: What about the last one?

Teacher 7: Is that is that so I guess that's a bit like we talked about before. The link between the sentences, coherence.

Researcher 1: yeah I guess that is important, but I was more thinking you might make some sort of inference about where they've arrived.

Teacher 7: Where they are yeah. Yeah we would talk about Where do you think they are? They'd say 'the sea'. Why? because it says 'gulls'. And yeah 'finally': they've probably gone a long way to maybe they they don't live near the sea; maybe they haven't gone away, maybe it just feels like it was a long way, because they were so excited to go on holiday that yeah. We'd talk about that kind of thing.

Researcher 1: Thank you; that's all because really interesting and I just got a couple of last questions, and then I'll pass over to Researcher 2.

Do you feel that learning to make inferences is an important or an unimportant part of learning to read or learning to communicate more generally?

Teacher 7: yeah I think its massive and as a teacher and it's just really interesting. Yeah because it's not enough to be able to kind of read at a very literal surface level and it's for for their understanding of what they're reading; for them to truly enjoy books and things I think they need, they need that; also for communication in general, because people don't always say what they mean and and they need, they need that skill, as they grow up.

Researcher 1: And is there anything that you feel would help you in teaching inference making? That you don't have currently or something that is helpful that you'd want more of.

Teacher 7: Well, I mean just seeing those terms like that, I knew some of them, but not all of them. I mean as a year 6 teacher, like it would be quite nice to have a resource with the suggestion of how to teach some of these other things, and maybe through a particular text and because they things we could so easily slot with what we're doing anyway. Those things will appear and it's just kind of stretching children, or giving them the opportunity anyway to to be exposed to these ideas and yeah I would, I would like something like that.

I don't know lower down the school. I'd say something similar could be useful, but that kind of goes beyond looking at illustrations and predictions and things like that. I think... yeah I mean we have we've had this little focus group that works with the ENCo who's kind of basically one of our SENCos looking at just at inference and and a lot of the children in there, some of them have special needs but it's children who are kind of borderline to reach age-expected at their SATS. And it was just a once a week thing - obviously they learned with everyone else about this, but a lot of them speak English as an additional language but but but were sort of new this year or last year, new to English. And I guess that just highlights the complexity of inference that you have to already have to know quite a lot of the vocabulary and things before you can get to that higher higher order skill.

Researcher 1: So you're saying you had a group that was actually working on this?

Teacher 7: yeah Yes it wasn't with me, but with the SENCo. But also some children who and sort of have some, aren't necessarily diagnosed as being autistic but have some sort of tendencies towards that, I would say, and then it's yeah recognizing that not everything might be interpreted literally, and learning that yeah.

Researcher 1: Thank you I'll pass over to Researcher 2 unless you have any questions to me at this stage?

Teacher 7: And now I guess i'm sort of wondering like: What do you hope to do with this?

Researcher 1: So I guess a bit of background is: we're linguists and look at how children learn how to make inferences in conversation. And then I really became aware of that, on the research side there's also a big area of how to make inferences in reading. And then there's how teachers are having to put this into practice. And those two areas of research weren't really talking to each other - when you'd expect that what they're doing when they're learning to communicate orally will interact with what they're doing when they're reading. Because we know it does, for vocabulary, for example. And then talking with other colleagues we just didn't really have any sense of what teachers are doing when they read that you need to teach inferencing. And so this is kind of like a first step to find out what's going on in the classroom. We're just interviewing a small number of teachers, but you gives a bit of a flavor. We hope to write that up, but really it's just a kind of a first step and and then to start thinking about what is the most useful thing to teach. And I for things like phonics we know that really works, and for vocabulary and certain interventions, like the NELI, I don't know if you've heard of that. Really tried and tested and like we really know we have a lot of evidence as to as to teach these things are. But as far as I know, there's very little evidence as to how to teach inference making or which types of inference to teach. Or whether actually it's best to concentrate on vocabulary and background knowledge and exposing them to rich texts; for general class you don't really need to teach inference. It is a genuinely open question.So that's where it's going. Ultimately we want to answer these questions because they are really, really important skills and we want to know should be something that classroom time is best spent on in the best way. Obviously we kind of know quite a bit about that in clinical settings. You mentioned, with autistic children, but then actually in terms of just a normal classroom, this is like the first step of that big idea basically. And yeah obviously we will follow up anyway, and hopefully we will write something up, and if anything comes of it will keep you posted.

Teacher 7: Yeah I’d be interested. Thank you.

Elspeth Wilson: yeah and Researcher 2, do you want to jump in with any other things?

Researcher 2: So…it's very interesting to hear, it was very thorough, the questions… I’m just going to have a few little follow up ones. So, first of all, I remember you mentioning a while back in the conversation that you had some kind of…role play…so kind of reading a book and then playing out the story, and I was wondering if you could kind of tell me more about that and potentially any other examples of incorporating, kind of, play or acting or things like that.

Teacher 7: Yeah, okay! I guess yeah this is really year three those kinds of thing, so…take the book amazing grace, I don’t know if you know it, it's a picture book about a girl who really wants to be peter pan in a play, but she's told that she can't be because she's a girl, because she's black because blablabla…this came out in the 80s, it was, I think, late 80s, is a big deal at the time there weren't very many books like this, then. Anyway, and she does… she's amazing, she's the best peter pan, in the end, and her mom and her grandma believe in her and tell her she can be anything she wants to be… anyway, so we look to that book together and there's some things that the children did, were to make freeze frames from different illustrations of how the other children are reacting to her… and when they saying that she can't be Peter Pan, and they look at the expressions, and then they do it themselves and the body language and then…yeah, talk about, I guess, what it suggests about how they're feeling towards her and why they're thinking that's about her, I guess it’s inference, and…What else? I mean this is three years ago… so we're doing pretty much every week, this kind of thing…another one that sticks out though, we learned about Macbeth in year three, we actually did it in year six as well, but in a totally different way, but yeah and… the kids just loved it and we use the BBC little video clips to help tell the story, but they also had like a kid's version of Macbeth to read and stuff, and then they helped make these big cardboard cutouts of the characters and their settings from Macbeth, so they were huge and we emptied the classroom and we filled it with all of these, and then they had all different activities, ideas for things that they could do, and when we made the land Macbeth, we set it all up the whole class, banquo, lady Macbeth and the castle and…and some of the things I like…go and have a phone call with lady Macbeth or have a sword fight with someone and…and then they went and interacted with the characters, they were just like little kids as they should be normally, and then…I guess that's the example of play, but how we…what we inferred from that, um…was more, um…

Researcher 2: It doesn't have to be…

Teacher 7: Yeah I don’t know if there was inference, really…what they did out of that was that they made a guided tour of the land of Macbeth so there probably was…

Researcher 2: I’m not looking just specifically at inference…

Teacher 7: yeah okay all right.

Researcher 2: I also do work…my focus is slightly differently, I do work on the use of play in learning, especially in English and language, yeah… so would you say that doing…that there were benefits in the children's understanding of the story to do this kind of interactive thing or….

Teacher 7: Oh absolutely, yeah…and it was…me, I could gauge how much they understood from how they interacted with the settings and the characters, and they understood a huge amount, and then actually thinking about it when we did Macbeth at the start of year six, we did quiatte a lot of drama-y things which I guess, we should cause it’s a play, but…we're following a plan me (? 1:21:46) by the BBC website, and so there was one lesson, they just love, which is where they went around throwing Shakespearean insults at each other, there was like an icebreaker insult generator and the context of it was, I think, is where lady Macbeth is rude to Macbeth and tells him that he's he's like a cowardly cat, he can't kill king Duncan, and that's all those sessions did lead into kind of inference work, because even though you're not necessarily studying it because they had to write character studies at the end of Macbeth and lady Macbeth and how they change through the play…but in terms of play, I guess, I don’t know if this counts as play but we did a lot of drawing with it, like experimental drawing, they made…well we collaborated with access arts (?1:22:31), a charity that I do some work with and they made this part of a case study that's releasing now, but we made these kind of great big capes, out of paper and charcoal and things, and they put them on and they were the witches and yeah…so I think the play… it really did help them to understand the story and just enjoy Shakespeare, it was great, one of the boys, he got like a copy of the play out of the library and we were talking about what was happening, what was gonna happen next, and he was like, wait like, let me just and he was like “it's like like act 2 scene whatever” and he’ finding it, and some of them made props and things at home, I never asked them to, but they just brought them in to draw, so the play makes a big difference.

Researcher 2: And, as a bit of a more general question… this applies to both your teaching now and your teaching in year three, how would you say your time is organized in terms of…how much of your time will be spent just talking to the children and the children passively listening, or doing, you know, solo silent work as opposed to maybe any kind of group work, pair work, kind of child led activities?

Teacher 7: Yeah, so… Is this in any lesson?

Researcher 2: Yeah! Just kind of as a general…

Teacher 7: Yeah…so I would say in an hour’s lesson, not all lessons are an hour, but a lot of them are, 20 to 30 minutes input, which sounds like a lot, but it isn't just me talking through that, so within that there would be time… there'll be lots of pair discussion…probably the most of the time when I ask a question I’ll say okay talk to your partner now, (?1:24:28) feedback, so they would always be contributing in that time, and then the rest of the time…or maybe 25 minutes of the rest of the time would be the independent pair or group work and then maybe the last 5/10 minutes will be some feedback of some sort, so again it's more led by me, but they would be contributing.

Researcher 2: Then…so I noticed that you asked which subject…would you say that certain maybe, kind of, subjects or areas of learning will be more kind of adult directed and some of them will be more activity, group based?

Teacher 7: yeah definitely but also some of them will have more broken up input so, for example in math they often will do…first some input then they'll go off and do some questions that sort of build on what we've done and there will be another five or 10 minutes input and then they'll go off for the rest… most the rest of the lesson because it’s sort of the (? 1:25:41) that stretches mthem and that way, when we do it that way, it means it kind of scaffolded it a bit more, and that if they're struggling with the kind of…the easiest stuff we can pick it up, then before they let loose at everything. But I mean, I don’t think there’s a lesson when I wouldn't do an input, because I would feel that that would be being a bad teacher so…I think it's equally important in subjects like art, DT (Note: this is design and technology), PE, it's vital that they’re taught skills, but I mean yeah it might be a shorter input, it might be… because you don't want to lose their interest, it might be like 10 or 15 minutes or something and then… I mean even in English, when I say “Okay, off to do a thing”, then i'll pull them back in for 2 minutes maybe, to look at something that's going well, or to pick up something that a lot of people are getting mixed up about. Yeah. I think yeah just say, like, I think there was something that came… i'm sure you know more about this than me but, some instruction that came from the government, a few years ago that input should be half an hour long or something and that very often before, that they were shorter, so I think there was a big push on doing like solid blocks of teaching and yeah…

Researcher 2: Okay, that's interesting to know. And then, would you say… so you discussed the examples of play within storytelling and specific (?1:27:20) So, of course, because this is my focus… because you teach older children, of course, the focus on play is a lot less… but would you say that there are ever any activities even within math, history, you know in any subject, would there be times where something is taught, like the the Macbeth examples, using things that are playful or kind of activity based do you have any other examples of that maybe?

Teacher 7: yeah I mean we probably do it a bit more in maths, so… might have some different resources, especially things on the tables, like manipulatives, so cubes and bead strings and numicon, all sorts of things and…or like play doh, strips of paper and say “okay, show me an eighth or make these factions and put them in order” and they come up with whatever they like, on how to use those materials to prove it… but I suppose, in general we don't have a lot of play-based things, I mean with SPaG (spelling punctuation and grammar) I'll try and make things games, but they're not…to make it fun to learn those things… but they're not…it's not open ended play that sorts of leaves opportunities to discovery and, to be honest i'd really like to have a lot more of it, I mean, and I think there is a…I mean, we’ll do some things like role play, even with science and when we learn about history of great scientists and things, we’ll do things like that, and…but there isn't a lot of, yeah, room for the open-ended play because… purely because, (even though I think there should be), because of the SATs, that the pressure is enormous and we can't cover the whole curriculum as it is, teaching in a way that doesn't always feel like it's very like…trying to pack information into the children so that they'll do well and well enough on tests at the end for which you are accountable and it’s sad, but I think that that's really what's dictating a lot of how we do things.

Researcher 2: Okay, so… okay so the curriculum here would be a factor in…so if you didn't have that pressure you think that it would be beneficial to have those kinds of methods?

Teacher 7: Oh yeah I mean I think it'd be beneficial anyway i'm just not confident that we could get through everything that…yeah, and then other…I guess other things that can hold you back working with colleagues when you're working in a team with other people and you're trying to kind of keep up at the same point of what you're teaching and if you're doing things in a much more open ended way, right? You don't quite know where you'll be the next day or in a week's time and they’re like pushing through it faster, it can be difficult, so you all need to be on the same page. I think these kind of things they need to have the support from the top to really work yeah.

Researcher 2: I think that's the end of my questions actually but do you have any other additional either questions or just last comments, based on what we've been talking about that you would want to add?

Teacher 7: Maybe one more thing to say because i'm looking at this board as i'm talking to you, but maybe this will show you sort of what it's like that… I mean in math we were teaching new stuff almost right up until the SATs to get the curriculum covered and after the SATs finished, we did fun math which was really fun, but it made me so sad that we'd have to wait until they were over before we could do it and a lot of it was much more open ended, we looked at, um, like Escher’s tessalations and they created their own tessalating patterns, some of them were incredible like cats that interlock and things like that, and we looked at all different types of spirals because we talked about maths in our fibonacci spirals, and I think like (?1:31:50) spirals and cardioids and how to make them and using algebra to make sure these incredible… I don’t know if you know what a cardioid is but they're these… if you google them after you’ll see what I mean, but they occur a lot in nature these incredible shapes and it all links back to things that they've learned through the year and the maths lead is one of the year six teachers and I think she would agree that “wouldn't it be great if we could do those things as we learned about the topics”, but we can't because then they wouldn't be able to answer all the test paper questions so yeah I think teachers know sort of how it could be, or maybe how we'd like it to be, how it should be, but it's not within our power always to do those things.

Researcher 1: Thank you, this has been really fascinating, thank you so much. Do you have any other questions for us at the moment?

Teacher 7: What are you planning to do Researcher 2 with the play research?

Researcher 2: So I’m looking into developing play based methods…well, first of all it's also just testing in an experimental and cognitive way the potential benefits of what we call guided play, so it's play that scaffolded by adults, the usual example is, you know…you have a science museum… a display at the science museum that's created to feel like the child has complete agency but it's created to fulfill learning goals, so the adult is here to guide, but the child is active and yeah…so that's what i'm focusing on. I am looking into skills such as specifically the ability to give enough information when requesting things, so the pick up example (Note: the “pick up the big blue cup” in Researcher 1’s list of examples) but reversed in the sense of having the child know to give enough information, so instead of saying “that one” or pointing they would… so obviously that's kind of with younger children because they do learn how to do that, after kind of seven years old generally, but looking at also using correct pronouns when telling a story, when reintroducing reference and you know, being clear with a narrative so i'm looking to create methods to train those skills, using play-based methods, but in general the focus is on exploring the value of play and learning.

Researcher 1: Thank you so much again and I’ll keep you posted with anything that comes out of this and also email you the book voucher as well.

Teacher 7: Great! Thank you, nice to meet you both and good luck.

Researcher 1: Thanks very much, thank you, bye bye!

**Teacher 8**

Researcher 1: Great, and so I wonder if you could just start by just saying a bit about that you're setting like key stage, state or private and what ages you teach or have taught and just that kind of thing.

Teacher8: And so, currently, I am in I've got a very lovely position in in the year three/four class and I'm in the five / six class, and so I basically teach the whole of key stage two but two days a week.

And yeah I don't really know how I'm surviving but anyway it's the end of term so, and so, and so yeah.

So we do a variety of things: in the year three/four Class we have whole class guided reading and the children take different characters on board from a set text, but we read the whole book so it's not extracts from, it's the the whole book. So when we read read a range of books by Tom Fletcher, I can't remember, CS Lewis, Michael Morpurgo: like what we would consider kind of quality texts, rather than Tom Gates type books. And the ones that can't access the text and because they aren't at the the right reading level just listen, so that they still involved in their comprehension questions that come up. So that they're still getting an understanding of the text and they're still getting introduced to vocabulary, rather than just having to read out the book band that they're at. And, and then alongside the guided reading each child has their own reading book and we have library time, so the children go and choose a book, that they can choose. It doesn't have to be a book at that level they come in nonfiction or it can be a fiction that somebody can read to them. Or it can be a picture book that they just really enjoyed when they were younger and want to read it again so so there's a lot of, there's some free choice; they've each got a book and then there's the class text as well.

Researcher 1: Thank you that's really helpful and just to dive into that a bit more, and I think both Key Stage 1 and Key Stage 2 curriculum and say that children should be taught to make inferences or to infer from what people say or do when they're reading or being read to, and so when you hear that what kind of influences, do you think of? What kind of springs to mind?

Teacher8: And it's well from my point of view, usually that something is either described or there's a character that's described is doing something and then we would talk about why they might be doing that. So if the character was shuffling down the street, we would be discussing well: Why is he shuffling? How do you think he's feeling if he's shuffling? And, and so whenever that comes up, we we stopp and we talk about why that might be happening and what the author is trying to get from the words that they've said.

Researcher 1: And are there any sort of particular methods or techniques or resources that you use to kind of support you in teaching?

Teacher8: And not not as in either bought resources or resources that we use. Usually if there is something, that is usually a character, that is, that we're talking about with inference. But it would be that we if they use a specific verb we would try and act it out so that we would have a go at showing them what that verb means, and saying well why is the character doing that; look at what it's doing; what is the author... why has the author chosen that word rather than saying that the character is feeling really unhappy and he's shuffling down the road.

Researcher 1: That makes sense. So kind of acting out and then basically kind of questioning to scaffold the children's thinking.

Teacher8: yeah.

Researcher 1: And would that be the same in year three/four and five and six?

Teacher8: yeah so our year five/ six, at the moment and the year 5s particularly are really, really tricky bunch and their behavior is just off the wall. So um so yeah so, even though we do teach your five six we don't necessarily do the same things in guided reading because guided reading is a lot shorter because of their attention span. So we were doing short lessons. So yeah unfortunately there isn't a lot of progression being seen, but yeah the behavior just always gets in the way of the learning at the moment so it's pointless I haven't got much evidence from year five/six. Sadly.

Researcher 1: So yeah, are there any other kind of techniques or any other places that kind of you incorporate teaching influence making into the classroom?

Teacher8: Well, and so at this end of the year we always do a summer production. And so it's an opportunity for the obviously drama to come to the fore. And there's usually jokes that go completely over the children's heads and so we spent a long time going over the jokes and why is it funny. And they just look at us, as we are gaffawing with laughter, and it's like, do you know why are we laughing, do you know why that line is funny? And so so it's that type of thing that isn't necessarily written into the lesson plans, or written into [] , but having to go over why things are funny or having to go, how to say your lines, is still part of the reading curriculum. So even though it's not a book that's when kind of play scripts come into their fore.

Researcher 1: yeah I could imagine that.

Teacher8: We did something called Pirates of the Curry Bean and there was so many kind of farting, rumblings down below: Captain Captain there's rumblings down below - the crew are unhappy". And yeah the audience find it really funny but the children like [shrugs] 'whatever'.

So yeah so um that that comes under inference, I think, because we're having to explain what it is that the lines are and why the lines are hopefully going to receive an audience laugh or not, as the case may be.

Researcher 1: yeah that's really interesting; I've not heard much about jokes or teaching jokes.

Teacher8: They just learn the lines, but they learn the lines and they they read them deadpan. And they dont'... it's getting meaning to that, right, rather than 'well I've said my line'. It's like yeah but it's not just the line is it? Because yeah it's all of those type of things that that's why they need to do, acting; that's why they need to do play scripts, and not just sit in the classroom and look at the text of play scripts.

Researcher 1: hmm yeah. I'm going to share my screen as well and and show you some examples of sentences which might require some kind of inference. We might kind of talk through it a bit together because it's a bit hard; obviously these are just like examples that kind of out-of-the-blue, but you know you always have a text or a conversation, to give you the context. And also don't worry about the kind of green labels down the side which are the kind of like the technical terms; I just put them there because some of them like 'metaphor', you might have heard of - I think it is on the year three / four curriculu, for example. You know it's just there just in case it's helpful, but if you think 'err I don't know that', just don't worry; it's just our you know geeky term for it.

I just wonder if we can go through, and just give your reaction like: Is this something that you would kind of teach if it came up in a text? like, if you would you stop and explain or ask the children about this? or do you think, oh no they get that - wouldn't bother mentioning it? or I wouldn't have noticed it. Or 'oh no that's too hard for them'? yeah just a sense like that.

So we can start with the metaphor at the top.

Teacher8: yeah so we'd talk about that and, and I might even draw it out, so they could see that actually it doesn't mean that the tree has got a little bobble hat at the top; it obviously means that it's snowing, and so the snows on the tree. And because they wouldn't, I don't think they'd get that straight away.

Researcher 1: So the next one is more referring to things or understanding how other people are referring to things. And so, like imagine if you had, like several different blue caps and you're having to say it's the big blue cup rather than the big red cup or the small blue cup something like that.

Teacher8: yeah they'd get that.

Researcher 1: that's yeah it's not something you'd really kind of develop.

And so yeah What about the next one, where you've got a question and an answer, but yeah it doesn't really directly answer the question.

Teacher8: We might talk about what the two questions have to do - the two statements have got to do with each other. And what the what the author was trying to mean by that. But I think most people might might infer that because they've got the piano lesson they can't play football, but I don't think that would take a lot of talking through.

Researcher 1: And the next one is really quite subtle: so if you say that he finished his book it presupposes that he started it and read it.

Teacher8: yeah I that be happy with that because they say that all the time, can I take my book, can I finished I finished, it can I change it so yeah. That would be fine.

Researcher 1: Great yeah I mean that's certainly something that we don't even really think about.

Metonymy is the next one, and we've realized that it's a slightly subtle example, but just to give you some other ones like the classic examples of with metonymy: the way you say things like 'Today number 10 has announced that...' or 'the White House has said that...' where you use like, in this case that the building to refer to the people or the person in it. So number 10 instead of the Prime Minister or instead of Boris Johnson. So you're using a whole to refer to a part or a related thing. Does that make sense?

Teacher8: yeah I think in that example that would be fine because it refers to a classroom and so the children would know. But if if you said, and if it was something that they hadn't necessarily come across - I'm trying to think of a collective noun or something that they haven't come across it would need talking.

Researcher 1: That's more at the level of vocabulary rather than inferring that you mean...the alarm in the blue classroom, or...

Teacher8: Yeah.

Researcher 1: And then the next one is kind of about matching the pronouns, so: 'John gave jack a book, because he thought he'd like it'. Which 'he' goes with John and which 'he' with Jack?

Teacher8: I honestly don't think that they would have a problem with that, I think, if I stopped them and said right which pronoun which pronoun refers to John and I think that it would over-confuse. If you stop and go over it. But i've never even considered that they might not know. It's sometimes, it's overthinking it isn't it.

Researcher 1: I guess, I mean some of these are more relevant obviously to key stage one as well, where it actually might be something that would have to be.

Teacher8: Yeah, I wouldn't, I don't think I'd go over that one.

Researcher 1: And then, in the next one, is obviously similar but the link between the sentences isn't there.

So, whether you'd infer something about how the two sentences are related.

Teacher8: No, I don't think I would, I think I'd just leave that one.

Researcher 1: Okay. And then finally: 'Finally they arrived, they opened the car door, heard the gulls and felt the salt spray on their faces'. Would you talk about anything there?

Teacher8: Yeah we'd say, 'where do you think that they'd arrived?' and maybe they could draw a picture of where you think that they'd arrived using the information.

Researcher 1: Okay, thank you that's really interesting. Is there anything else that you want to say or something that's beens sparked by those examples?

Teacher8: No, we did... when we were, we went through a phase of looking at a poem a day, using I can't remember which poetry resource, it was it was an online poetry resource - maybe it was the poetry archive, children's poetry archive - and then we looked at a poem a day, and particularly when we were looking at things like jabberwocky and...

Teacher8: Oh, which was the one 'they went to sea, they did, they went to sea....' The jumblees. And so, when when we were talking about poetry, particularly, we had a go at drawing the images or what it created in our head, because there was an awful lot of not necessarily inference, but there was inference, that the children just didn't really understand the poem and so pictures are really, really key in finding out actually what they thought was going on. And then we could discuss what the poem was trying to recreate.

Researcher 1: that's really interesting.

Teacher8: We do [use the poetry archive]. Some of the poems are a bit... I think at Christmas, there was one called the snowman and it was it was a supposedly lovely poem and then the more that you read it, the more they actually realize that that the snowman died, and it was all about death and I was like, well let's just gloss over that. I hadn't really thought about the inner... nevermind you live and learn ... fine just carry on right we're moving on to maps now.

Researcher 1: poems are like that though aren't they, the more you read and dig into them...

I've just got a couple of other thing I think then questions that I'll pass on to Researcher 2 to see if she wants to pick up on anything. Do you feel that learning to make inferences is an important or an unimportant part of learning to read or communication more generally?

Teacher8: yeah No, I do, I completely do. And we've got an autistic boy in the class that cannot infer at all and it's a real challenge to try and make him understand, well even the tone of voice of what his friends are trying to communicate with him, because everything is just completely emotionless. And so it sometimes you have to therefore go overboard and say when I'm saying this, this is what I mean, even though I'm not actually saying the words and I think it has helped some of the other children in the class that don't necessarily pick up on those cues.

Researcher 1: mm hmm. And do you think that is there anything that would help you and with teaching inferring or inference making?

Teacher8: I think it is one of the skills that is harder to teach because there's an awful lot obviously there's an awful lot of resources, about fluency, there's an awful lot of resources about comprehension, but if you break down the comprehension, into inference and deduction that... We certainly haven't found that there's a kind of inference and deduction and I don't really mean a scheme but resource that you can... even if it's like pictorial and that you can infer what's happening in the picture, rather than actually being words. Yeah, we haven't found something like that, but that would be really, really helpful.

Researcher 1: Thank you. um do you have any questions for me at this stage?

Teacher8: No.

**Teacher 9**

Researcher 1: Okay, I'll dive straight in and just to sort of set the scene I'm wondering if you could just say a little bit about your school setting and you know the year group you teach you know, just like whether it's a state school private school, and just like some quite general things just to kind of give a bit of background.

Teacher9: yeah, and so I teach in a school in the north of [town anonymised] and in the [postcode anonymsed] area and it's a state school, normal state primary school and it's got a higher level of pupil premium children than the national average, and a higher level of children with special needs than the national average and of English as an additional language and and, yes, quite kind of a mixed catchment.

Researcher 1: yeah yeah we're in the [postcode anonymised] catchment as well so I can imagine, although there are lots of schools here.

Now, which year do you teach?

Teacher9: I teach year one and I'm only in my first year at that school and I was in another school in the area previously for my first year teaching, and so my first year at this school and I'm teaching year one.

Researcher 1: Great I mean feel free to kind of answer any question either you know, with reference to this year also your previous experiences, or even where you've been in training, you can put anything in and that's fine.

Okay, to jump in: the national curriculum for key stage one as well as Key stage 2, says that children should learn to make inferences based on what people say or do, when reading or being read to, and I wonder when you hear that or when you read it: what kind of inferences do you think it's talking about? What springs to mind?

Teacher9: So I think one of the things we do focus on is characters' emotions, in the year one curriculum. We focus on how characters are feeling and looking at pictures and text to kind of gauge that. Other inferences.... I think just kind of about... It's reading between the lines isn't it, between what's being said and kind of... Yes, I mean the main one, we do focus on is characters' feelings.

Researcher 1: And like, how do you can incorporate that into your teaching? like focusing on these feelings?

Teacher9: yeah, and so we do quite a few different kind of things like comprehension and asking questions and answering questions about stories. And so we teach guided reading every day and in guided reading we read a text and then answer questions about it and ask questions as as the children are going through the text. And we also have English and we have text based English lessons and then we also have phonics lessons, and we use storytime phonics for that. So that's based on based on a story book, as well, so it's kind of lots of different reading stories throughout the day. And so it kind of comes into all of those lessons.

Researcher 1: And the main thing is, I guess, especially in guided reading would be - just reflect back what i'm hearing to check I've understood right -the text, and then you may be asked a question, like, "what do you think the characters feeling here", something like that, and then the children...

Teacher9: yeah so we will kind of read the story together and, kind of, I plan the questions I want to ask beforehand: So how are the characters feeling? That making predictions as well from what you've read: What do you think might happen next? And yes, those kind of, those types of questions.

Researcher 1: And do or say like model any answers, or do you just wait and see what the children come up with .

Teacher9: yeah so I kind of and encourage them to look at that text and the pictures. So I might ask, kind of ask a child, to kind of scaffold the responses. Say it was a prediction question like: Ask a child to summarize what has happened in the story so far and then kind of the next step would be what could happen next. And then I tend to kind of take various children's answers, of what might happen next, and encourage them. Definitely the word that we focus on a lot is 'because' in guided reading lessons, and encouraging them to really use the evidence from the text.

So, definitely, it will be kind of maybe I would, I would say, "I think this might happen because" or "I think this character is feeling this because", and then would encourage children then to give their own answers.

Researcher 1: Thank you that's really interesting.

You talked a bit about this already, but are there any other kind of specific resources or techniques that you use and doing this, or perhaps that you've seen other teachers years.

Teacher9: In terms of asking those...

Researcher 1: yeah or just sort of infering in general.

Teacher9: And yes, so kind of at my previous school, we had kind of seven - I can't remember whether it was seven or eight kind of aspects to guided reading. And so it was a framework of questions, and it was seven, I think it was seven, skills. So it was like retrieving information for text, summarizing, predicting, and making inferences, making links to other stories that they've read. So that was kind of a framework that we had so then it had kind of questions that you might ask about those topics. And so that was kind of in my previous school that was kind of what we centered planning around. And in my teacher training we were taught about different kinds of levels of questions, different orders of questioning: kind of those simpler level questions which are less demanding, and then we've kind of high level questions like making inferences and kind of making sure that in any lesson there's kind of a mixture of those different types of questions.

And then, yes, so, my school and, at the moment that the guided reading is quite planned for me. So I kind of get I get kind of a lot of planning given to me. So I kind of write down the questions on a like a whiteboard I want to ask, but some of them are given to me to then ask to the children.

Researcher 1: I see. So just getting back to these different types of questions because that's great so the simpler questions would that be things like can have more like description.

Teacher9: yeah yeah and so those kind of yes, simple questions were describing what you see, and or kind of locating something in the picture so like: "where is the bear?" or like "what word did they use that means the same as shout?" - no that's that's probably a high level question actually, but just kind of is very simple questions: retrieving information from the text quite simply or from the pictures. And then those mid level questions kind of that might be more summarizing what's happened so using those skills and then those high level questions which kind of involve several steps of thinking.

Researcher 1: that's really interesting .I'm going to share my screen next show you some examples. Okay, so what we've got here as a ton of examples of different types of inference. Don't worry too much about the kind of technical green terms on the right hand side: I just put them there because some of them like 'metaphor', you might be familiar with, or have heard of, but there might be some that you think "no idea what that is". And that's absolutely fine. And on the other side it's an example of that kind of inference.

And I might kind of talk you through it a bit because, of course, you know it is this example out of context and these things usually work in a context, in a story.

And what I'd like to I get you to do is, if we go through them, whether you could just give your reaction, like: Is this something that I need to kind of pick up on when I'm teaching - you know if it came up in a story or something - or is it something that I think you know, the children can get so I don't really need to mention it at all. Or: I might recognize it, but we don't do that key stage one. Or you know just to give a sense of whether that is something that would come out when you're doing these comprehension kind of discussions.

We'll start off with the first one is metaphor, so, for example: it snowed in the night, the tree wore a white hat. Is that something that you to pick up on in your teaching?

Teacher9: um I would say we wouldn't. I wouldn't tend to um... Well, no, actually no, I think I think, no, I think I think I might say so, "what do they mean by hat? Is it really going to be wearing a hat? what could look like a white hat?" So yes, I think, as well if there was a picture to kind of go alongside it, I think that then could be, with that scaffolding of lots of different questions to lead up to that, I think the children could kind of get that. But we don't tend to teach kind of metaphors for writing in year one so it could be something that we could kind of lead up to.

Researcher 1: the next one - reference like referring to things. Imagine a context where maybe there's like different cups so you know it's the big blue cup not, the big pink cup for something or the little blue cup. And this might be about speaking, as well as kind of understanding.

Teacher9: Okay, sorry... so?

Researcher 1: And like would you work with the children on either understanding that kind of description, like what it's referring to, or getting them to like produce a kind of helpful description like that?

It's fine if the answer is no, because they might not all relevant to all the different years and whatever say.

Teacher9: I'm not not too sure about one sorry.

Elspeth Wilson: No don't worry. So the next one: 'do you want to play football this evening? I've got a piano lesson' I think the idea here is as adults, we probably infer that like he doesn't want to play football, at least he can't but he's not said that directly. He's not said 'no'. So yeah, this is a reading between the lines, so is that something that you'd pick up?

Teacher9: I think that, in that context that's a very subtle one and so I think we would kind of discuss: Why hasn't that character answered that question? So yes, we would discuss it.

Researcher 1: Maybe you feel like it's quite subtle so...

Teacher9: That example is.

Elspeth Wilson: The children might do that a bit more.

Teacher9: yeah yeah.

Researcher 1: yeah. And so the next one is like very subtle even for adults: like we don't really think about it. You say like he finishes the book, but then you're presupposing that he started his book; like you're assuming that he actually started it, even though we've not said that.

Teacher9: um no I don't think we did that one, no.

Researcher 1: And now the next one we've decided isn't a super clear example but I'll give you some other examples of where we use my autonomy. A very classic example is things like in the news, they say "today number 10 has announced that..." or "today, the White House has said that..."

That using in this case, like the buildings to describe the person inside like Boris Johnson or Joe Biden. So you like using something else, like a bigger thing, like the building, to refer to a smaller thing, or a different part. So in this case: 'the fire alarm went off, it was a blue classroom again', it's like the blue classroom refers to you know someone or something in the classroom, that made the alarm go off. If that makes sense.

Teacher9: yeah that does make sense yeah, and I say that might be something we wouldn't tend to discuss. We'd just kind of carry on when reading.

Researcher 1: Yeah. And the next one is about kind of basically matching up the pronouns. So if you say, 'John gave Jack a book because he thought he liked it'. Which 'he' goes with John and which 'he' goes with Jack.

Teacher9: Yeah so that might be a type of question I'd ask probably not in a maybe not in a guided reading session, but when I'm kind of doing one to one reading, with a child. And kind of wanting to maybe assess how closely they're understanding what they've read themselves; so rather than me reading a text and then them listening to it - when they've actually read it, that would be kind of one of those questions where you're sort of seeing how closely they're following along, following what they're reading, and so yes, that would.

Researcher 1: Yes, so like when they're also doing the decoding, focusing on that and then you're seeing like how much they will say...

Teacher9: Following along yeah.

Researcher 1: And so obviously the next one is quite similar, except it's missing that kind of link between the two sentences, so that's something that you might infer when you're reading. Like: what's the connection between the sentences?

Teacher9: yeah yeah um. Yeah again it kind of might be might be something that is... I do have to say, for the one just before and for this one, it's not something that kind of comes up particularly often. You do tend to be much simpler.

Researcher 1: This is all really helpful, as I said, like if every answer is 'no, we don't do this' that's still helpful.

Teacher9: yeah.

Researcher 1: And the final one: 'Finally, they arrived. They open the car door, heard the gulls, and felt the salt spray on their faces'. Is there anything you'd, like, ask you about?

Teacher9: um yeah so for that for that sentence, I might ask: 'Where could they be? Where might they have arrived? And what clues do you have there?' And so I think they might have arrived at the seaside because they can hear seagulls. And so yes that's kind of how I'd, if we'd read that sentence as a class, that's kind of the question I'd ask from that.

Researcher 1: yeah great Thank you, thank you very much. Right I've just got a couple of final questions and I'll hand over to Researcher 2 for some things she wants to pick up on and talk a bit more about the kind of play angles, as well. So do you feel that learning to make inferences is an important or an unimportant part of learning to read and kind of communicating more generally?

Teacher9: Yes, I mean definitely. So um I did an English degree so yeah very much. It was like half English language and half literature - so my whole degree was on I mean and literature degrees is making inferences really. So to me, that is something that's that's very important. And I do think with the kind of the comprehension side of learning to read, because in year one it's very focused on phonics and getting them to decode what they read and sound out words, and I think it's it's incredibly important to have the other side to it as well. I think, particularly so sort of in like guided reading lessons where it's... so, where it's listening to a story and answering questions on that and I think sometimes that's where the children who struggle with reading, but who are good communicators where they really kind of shine. So I think that's incredibly important, because you can get children who are very - they sometimes feel quite down about their ability to read, but I think if you are very much teaching them, you know, reading isn't just decoding these words but it's like it's assessing, like getting meaning from things - I mean yeah I think that's incredibly important.

And something as well on my teacher training at [ that we were kind of very much taught - and again it's nice for those children who who struggle with the actual decoding - is about teaching them to like "read" lots of different things, and so in turn like making inferences. So not just reading a text and making inferences based on that text, but looking at a picture and "reading" that picture. And so kind of we do things around: like we have a week at the school, where I'm at now, we have a week based on one painting, and we teach our children to read that painting and make inferences about what might be happening here, what you know why could those people be there, what might happen next, what might have happened before.

And also, maybe watching short films and and so kind of "reading" lots of different things. So I think that's kind of it's quite nice that kind of building those other skills as well as just kind of decoding, yeah.

And yeah and I think as well about kind of something which I'm quite interested in is children being able to express their opinions about stories and kind of almost be critics of stories, and I think it's quite nice sometimes when a child says, 'oh actually I don't like that thing that that author has done, because'. So I know again that's that's not making inferences that's kind of opinions, but um I think it all kind of leads into that. I don't know: just feeling confident in almost becoming like a bit of a critic of stories and stuff, and yeah.

Researcher 1: Thank you and finally: Is there anything you feel would help in teaching inference making? Anything that you feel would support you that you don't have or you know something you do have you want more of?

Teacher9: I think what's what's quite nice with - I think our question prompts are quite nice and at the schools I've been at they've had very good, there's been very good input from the English lead of the curriculum at the school, and so there is that kind of support there for what questions you should be asking; what are the like questions stems? How can you start off the question? and so I think that that type of thing is very useful: almost those question stems that you can fill in.

And that's also are the phonic scheme that we use has: we read a story, when we introduce each sound, we read a story based on that sound. And the stories come with bookmarks in them that have lots and lots of different questions that you could ask about the text and, like really varied questions. And I think those were developed by someone at the Faculty of Education. So each story has a bookmark and it's just got loads of question prompts on it, because I think it is very, very easy to ask the same questions over and over again about the story. So yeah that that kind of those sentence stems almost for questions is quite a useful thing.

Researcher 1: Thank you that's all really interesting. I think that everything for me. Do you have any questions for me at this stage? Otherwise I'll pass over to Researcher 2.

Researcher 2: Can you hear me?

Teacher 9: Yes, yeah.

Researcher 2: Okay, um, so this was all very interesting to hear, and so it seems like here, most of the discussion was focused a lot on reading because it's what Researcher 1 studies, but I was wondering if you also did any work with kind of oral narrative production, so storytelling of any kind and yeah I was wondering if you could tell me anything about that.

Teacher 9: yeah, so we would… when the children are kind of… so how we how we structure our English lessons is, we will base everything that we do around a story, and so we kind of have a three week unit of work, about one story and so we might read through a story together, do some work on that story, and then the next part of that would be the children making their own story about it, so I’m trying to think of an example…we read Stanley’s stick, I don’t know if you've heard of that story, it’s about a boy who finds a stick on the ground and then he imagines it's all different types of things, and he has all those adventures because it's a sword, and then it's a trumpet, and so we might read that story together and then, when it's the children's turn to to write, they would do a story called stanley's leaf and they've got a leaf and their stories are based around all the different things that this leaf could do so, and that is the lesson that we do teach, and so what we do for that story is when they're trying to come up with their own ideas is go to the forest area of our school and get them to get a leaf, and then kind of play and think of all the different things that that leaf could be to help them generate their…those ideas for a story and just have some time to kind of play around with that, and then we might go back to the classroom and ask them to draw some pictures of the different things that they did with their leaf and then quite often, what we then do is talking to a partner and telling your story to a partner so, giving them some time…it's more in in preparation for writing actually I tend to do it, rather than kind of just in terms of verbal… for the skill of it being a verbal thing, it tends to be more in… this is more in preparation for writing that then… that they then talk through their story with a partner before writing it down, so we do kind of have those opportunities to rehearse their ideas for writing verbally, in terms of actual verbal storytelling we don't actually tend to do that much of that by itself.

Researcher 2: Okay. And you mentioned a couple of examples going through the forest and you mentioned using play, and so… would you say that generally you consider play a tool for learning in itself, as opposed to, you know, a break in between learning… so yeah if you could tell me more about your conceptual view of players as a learning tool.

Teacher 9: yeah, so I think it is very, very, very important…I think particularly with very young children, and I think it's…it shouldn't be lost as they get older, but with very young children it's really hard to…I think when you've had much fewer life experiences, it can be hard to kind of just like… to just think of things and not actually be active and being engaged and stuff, so I think it’s a very, very important thing. In terms of actually how much I get to incorporate that into learning, that is very much constrained by the timetable that I’m given, so um, so we will kind of… we will do that as much as possible but I think year 1 is an interesting year because you do get… Reception tends to be very much play led, I think, and then year two tends to be very much…in a lot of schools tend to be…I mean, it can be very play led but less, so much less than reception and I think that's definitely…it tends to be throughout school, but it kind of goes like that, I think \*gestures a decreasing curve\*, and year 1 is an interesting year that schools do very differently so for some year one looks very much like reception. So yes, I do think it is very important, and also that kind of experiential learning… and I think that's very important for, particularly in an area where you…in a school where the catchment area is slightly more disadvantaged, and what's brilliant about play is it's so good at developing speech, and I think something definitely tend to notice is that children’s speech is very underdeveloped quite often and it's incredibly hard to teach reading and writing when that speech isn't there, it's almost like that foundational block and I think that's something which is really lovely about play based learning is there are… there's plenty of opportunities for talking.

Researcher 2: And so, how much, would you say, so you mentioned being constrained by the timetable…

Teacher 9: yeah.

Researcher 2: (? 34:05) and I mean over all subjects, not just specifically English, what percentage of your time would you say is spent just talking to the children and them listening and how much is kind of more child led, pairs, groups, play based, any kind of, you know, child led learning.

Teacher 9: Yeah so I tend to try to keep my inputs as short as possible, because I mean their attention starts to wander after about five minutes you know they're struggling a bit so I tend to keep my inputs around 10 minutes, 15 minutes at the absolute most if there's quite a lot to get through, but then I like to break that up with lots of discussion and like pair discussion and stuff so in terms of actual listening to a teacher talking that would probably be about 45 minutes a day I’d say, and then, I mean we do do group work and pair work but we'll see kind of individual book work as well.

Researcher 2: Okay., what proportion…I'm not looking for a percentage or something but how much of the non “listening to a teacher” time would you say is play based and how much will be individual and more, you know…

Teacher 9: yeah. I think it's very dependent on the subject, I mean, I would say phonics can be very play based, so we kind of tend to have the phonics, an initial lesson where it's some kind of sparky activity to introduce a sound so things like going on a bear hunt in the forest area to search for words with the sound that we're learning on, or like hitting… like kicking a ball into the goal for the O A sound so…that's kind of…the phonics scheme is very play based, so we tend to do with phonics one play based lesson and then one more writing based lesson and that tends to alternate. English, we tend to have a balance between that kind of hook, to get them started, or that experience to get them started, and then time for writing in books, so maybe we would have one lesson at the start of the week, where it is that kind of playing, or being hooked by a story, and then we would tend to do writing for the rest of the week, maths is more kind of in books, and is more… I'd say that's the less play based, we do, we still do have some lessons like that, but much more in books and then the kind of topic based lessons, they tend to be where we kind of can really incorporate more play based learning and just, I mean things where it's really active like going on a (? 38:01) hunt and looking for insects or working in small groups to test out different materials to work out which one will make the best boat so yeah it's quite dependent on the subject I'd say.

Researcher 2: Okay. Moving to something a bit more like…actually kind of closer to what you were talking about with Researcher 1…I’m more looking into the production side, she was looking at how children understand things, so the first example well, the first thing that I'm wondering about is something like… a sentence like “pick up the big blue cup”, and if you have kind of a situation in which you have some toys, some of them are quite similar and a child has to request something specific, in the ages you're teaching, how kind of naturally proficient would you say they are using at their words precisely, like “can I have the big blue cup?”, as opposed to just pointing, saying “that one”, is that something that you observe kind of in the day to day classroom?

Teacher 9: Yeah so I say by year one I would say most tend… seem to be quite good at using language precisely, and kind of when they are having that free playtime I would say that…I mean they tend to be having very specific conversations, they’re really engaged, but it…in that bit… but it really is… it's very different depending on the children, so I’d say the children I really do work with them being specific with their language and rather than just pointing at things, using their words, tend to be the children with speech and language difficulties or the children on the SEND register (Note: special educational needs and difficulties) but I'd say, for the most part kind of being specific with language isn't something I do massively pick up on for most children.

Researcher 2: Okay that's interesting, and can you think of any other… this is a question I’ve had quite varying responses to actually…you might not…but are there any other factors that you can think of that might be…in the kind of you know personal and individual differences in that (that = reference skills), are there any…does it seem to be kind of linked with other skills so children who are better at specific things might be better at being informative, maybe social skills or language skills?

Teacher 9: Yeah. So it was kind of kind of, in being specific with their language, what are the other things they tend to be good at?

Researcher 2: Yeah.

Teacher 9: Interesting question. Um I think the children who struggle with that tend to struggle a bit more with communication in general, so they might be the children who play very physically with other children, or maybe play alongside other children without necessarily engaging closely in a game, and might also be children who struggle with… struggle with generating ideas for writing and struggle with those comprehension questions in English…there are a couple of kind of children who I can think of, and who I do kind of really work on that with them and they do struggle with writing quite a lot, and coming up with ideas for things, because I think again, it is that language, being the foundation of things…

Researcher 2: Absolutely. Then you mentioned focusing on feelings earlier and generally also mentioned the images…do you do any work based on description of characters, maybe emotionally physically etc, kind of teaching children to you know, create informative descriptions, is that something that you would…?

Teacher 9: Yes, yeah so we have…kind of when we were doing an activity on how characters are feeling I would have like a vocabulary maps of different emotions and try to teach them different words and not just like…we’d teach sad but also devastated and like teaching different language, then I'd kind of have a vocabulary map there which they could select from and use…in terms of creating detailed descriptions of characters quite often we do kind of an adjective labeling activity before, so this might be a lesson, the lesson before they do a piece of writing, a longer piece of writing so where it might be that they've created their own character, based on a story that we've read, and they draw a picture of their character in the center of their page and then I get them to to label that character with adjectives, so they can have that there as a tool for in the next lesson when they are writing, so they use that description, and in that lesson we might kind of discuss vocabulary, make a big bank of adjectives that they could use, and then they kind of select from those to label their character.

Researcher 2: And then last question… so usually I ask this one mostly related to oral narrative but actually it relates to anything written as well, do you…so the example that…one of Researcher 1’s examples, one of them was the anaphora resolution one, which was the one where pronouns… they had to understand which pronoun refers to which character, and I was wondering if you had any insight on the production side of that, in terms of whether if children are creating a story in your class, are they able to use pronouns when appropriate to introduce referents, refer back to them, understand when it's important to use a noun, yeah…

Teacher 9: I think that tends to be quite a sophisticated skill, for them, particularly in writing and there are a few children in my class who do get quite confused with pronouns so they might write “him picked up him all” and it’s a slight speech and language issue as well, it's probably more those children who do struggle, a bit a bit more, but the pronouns can be a bit of a recurring issue and then, maybe a lot of children they might…I think that skill of kind of linking that sentence that they've just written to the sentence before and then to the sentence before back, I think in year one we are more focused on sentence level writing, so you might get a story where it said, James woke up James when downstairs James had his breakfast James went to school and I think we tend to focus on these individual sentences a little bit more in year one because it's harder, so it tends to be the the more sophisticated writers, who can kind of use pronouns fluently.

Researcher 2: Okay, I think that's all of my questions. Thank you so much, it was all very, very interesting. Do you have any questions for us?

Teacher 9: And know if I can think of.

1. this is the software that provides Accelerated Reader programme (Researcher edit) [↑](#footnote-ref-1)