Chapter 11 Developing reasoning to encourage deeper writing

Michaela Oliver

Teachers' Standards

This chapter will help you with the following Teachers' Standards:

TS2d Demonstrate knowledge and understanding of how pupils learn and how this impacts on teaching

TS3a have a secure knowledge of the relevant subject(s) and curriculum areas, foster and maintain pupils' interest in the subject, and address misunderstandings

TS3b demonstrate a critical understanding of developments in the subject and curriculum areas, and promote the value of scholarship

TS3c demonstrate an understanding of and take responsibility for promoting high standards of literacy, articulacy and the correct use of standard English, whatever the teacher's specialist subject

TS5. Adapt teaching to respond to the strengths and needs of all pupils

Key Questions:

- What does reasoning look like in English?
- How can we promote reasoning in English lessons?
- What kinds of task structure support the development of reasoning?
- How can reasoning about texts support reasoning when writing?

Reasoning is undoubtedly an important skill to develop within children, yet knowing what this looks like in English and how this should be promoted is not always obvious. Consider the following exchange:

Student: "I think having an important message or a moral is the most important feature of fairy tales."

Teacher: "Why do you think that?"

Student: "Say for Red Riding Hood, the mother says stick to the path but don't go off the path otherwise you'll lose it and you might walk into strangers and you're not to talk to strangers but Red Riding Hood went off that path and it teaches the people who read it...to listen to their mum and not to ignore her."

. . .

Teacher: "Can you tell me why you've decided to put message and moral right at the top of the diamond ranking grid?"

Student: "Because the only reason why you really have a fairy tale story is to teach you a message or moral."

This example demonstrates a teacher-pupil exchange designed to elicit the child's reasoning behind particular task decisions. The group were completing a diamond ranking exercise

(discussed in more detail later). Through careful questioning, the teacher was able to elicit the child's reasoning behind this assertion, as well as examples from particular texts within the fairy tale genre.

This chapter will consider reasoning, its importance and how it might be developed within primary English lessons. It will outline what reasoning looks like in English and how to explicitly model and teach it. The chapter will also consider how promoting reasoning about texts created by others can encourage students to make more reasoned decisions when creating their own texts, thus leading to deeper writing.

Reasoning in Primary Education

While it is widely accepted that teaching reasoning within schools is important (e.g. Trilling & Fadel, 2009), the difficulties teachers face in this endeavour have also been recognised (Wegerif, 2010). Now often prioritised in relation to maths and science, as seen in curriculum priorities and CPD opportunities, reasoning does not seem to be given as much attention within English.

A major problem with teaching reasoning in English is that there are a multitude of definitions offered for reasoning, as well as a plethora of associated terms to describe (to a greater or lesser extent) practices involved within the reasoning process.

Another major issue with teaching reasoning in English is that the programme of study for English in the National Curriculum and end of KS2 SATs do not make explicit the required reasoning practices to be developed through education. There is no clear consideration given to developing reasoning skills (i.e. the skills required during the process of forming and supporting conclusions). While elements of reasoning are implied throughout, there is no framework for progression and statements implying particular aspects of reasoning and types of evidence are commonly repeated across key stages. We will now move to consider what reasoning looks like in English lessons.

What does reasoning look like in English?

In English lessons, what is considered to constitute evidence and therefore the basis for reasoning differs from that within other subjects. For example, reasoning in science might require engagement with experimental data and methods to support conclusions or arguments. English requires its own forms of evidence to support inferences and conclusions made. Key elements such as genre, structure, language and the context in which a text is based and/or written (such as historical, economic or religious contexts) play an important role in providing evidence, or reasons, for inferences. Each of these elements can be used with varying effects by writers and as a result, each of these features represent important categories for analysis and interpretation. Arguing that a happy ending would be expected in Little Red Riding Hood, since the fairy tale genre typically employs this structure, demonstrates use of genre as a form of evidence to support an assertion. Explicitly focusing on key elements of genre, language, structure and context, in terms of the ways in which these aspects can represent evidence for readers' interpretations, will therefore strengthen students' capacity to reason.

It is important to consider two dimensions of reasoning within English. Reasoning processes can be drawn upon by writers when they are creating texts and they can also be drawn upon by readers when interpreting and critiquing texts written by others. The reasoning involved has the same foundations, but when critiquing the literature of others, this reasoning is taken from an analytical perspective. This is illustrated in the parallel lists below:

When **interpreting and critiquing** texts, reasoning in English draws upon:

- Consideration of the genre(s) drawn upon within a text, including its associated conventions, how this is employed, and to what effect.
- Reflection upon the organisational devices and structural features utilised within a text to achieve a sense of unity.
- Consideration of the use of analogy to create, explore and contrast images, characters and themes within and between literary texts.
- Reflection upon the context (e.g. historical, social, religious, biographical) in which a text is set and was created.
- Consideration of the impact/effect of particular linguistic devices and language choices.

When **creating** texts, the author:

- Categorises the text into literary genres in order to draw upon or stretch genre conventions.
- Makes use of and reflects upon structures in the text designed to create unity.
- Uses analogy to create, explore and contrast images, characters and themes within and between texts.
- Considers background contextual aspects which support the creation (and guides subsequent interpretation) of a text.
- Uses language to direct and flavour text (see Oliver, 2019, for further details about the theoretical underpinnings of these suggestions).

By explicitly considering and strengthening reasoning while reading, critiquing and interpreting texts, children can be guided to practice these reasoning processes during their own writing. They will be supported to explicitly consider the potential impact of their own creative choices upon readers thus gaining control over the potential ways in which their writing may be interpreted.

Activity

Recap children's knowledge of the fairy tale genre. Discuss examples and consider typical features of texts within this genre. Next, present small groups with blank diamond ranking templates accompanied by nine cards displaying features of fairy tales (such as hero, villain, happy ending, message/moral, magical events and so on). Children work as a group to discuss and decide upon the placement of these features within the diamond grid. This may require teacher scaffolding, particularly if children are not accustomed to group discussion and debate. Children should be encouraged to articulate their reasons for deciding why they have chosen to place features in a particular place, and why they think some features are more or less important than others.

Once children have practised reasoning about a genre, which is largely informed by their experiences of reading within it, they can then move on to use this reasoning when writing their own fairy tale texts. Asking children to write their own fairy tales may be a relatively common activity, yet doing this with an emphasis on reasoning development will promote writing at greater depth. Children will be able to draw upon the understandings of the genre which they developed and articulated in the group diamond ranking exercise when they are constructing their own texts. For example, they may emphasise the importance of a message or moral in their own story planning and writing if this aspect was deemed very important in the discussion activity.

[End of activity].

How can reasoning be promoted within the classroom?

It has been identified that focusing on reasoning while reading can develop more reasoned writing, thus, consideration now moves to focus on ways in which reasoning can be promoted within the classroom. If we want to develop children's capacity to reason, and in turn develop the depth and quality of their writing (both fictional and non-fictional), we need to give sufficient opportunities to practise and hone these skills. The importance of language and communication are central to the development of reasoning. Dialogic approaches to teaching (e.g. Alexander, 2015) can support reasoning development by harnessing the power of talk and dialogue to further learning (remember the student: teacher dialogue presented at the very start of this chapter).

Focus on Research: Robin Alexander's framework for dialogic teaching

Robin Alexander is a seminal figure within dialogic teaching research. He argues that "dialogic teaching harnesses the power of talk to stimulate and extend pupils' thinking and advance their learning and understanding" (Alexander, 2015, p. 62). Alexander describes five principles which he suggests bring together the essential features of a dialogic classroom. Thus, dialogic teaching is:

Collective: teachers and children address learning tasks together, whether as a group or as a class, rather than in isolation;

Reciprocal: teachers and children listen to each other, share ideas and consider alternative viewpoints;

Supportive: children articulate their ideas freely, without fear of embarrassment over 'wrong' answers, and they help each other to reach common understandings;

Cumulative: teachers and children build on their own and each other's ideas and chain them into coherent lines of thinking and enquiry;

Purposeful: teachers plan and facilitate dialogic teaching with particular educational goals in view.

[end of focus on research]

The main arguments for adopting a dialogic approach are similar to the benefits of small-group work discussed below. Thus, dialogic teaching: promotes communication; develops relationships, confidence and a sense of self; develops individual and collective identities; develops spoken language and high-quality talk which scaffolds understanding; engages attention and motivation and leads to measurable learning gains; and it supports citizenship goals through a focus on reasoning, debate and argumentation skills (Alexander, 2015).

This focus on dialogic teaching illustrates the importance of talk to the development of reasoning. But this talk has to be different from the traditional modes which still dominate in some classrooms. There have been frequent reports of the limited amount of talk within classrooms, often accompanied by low level tasks and questioning (Howe & Abedin, 2013). Alexander describes three traditional kinds of teacher talk linked to direct instruction: rote, recitation (which dominates overall) and instruction/exposition. Rote forms of talk relate to the repetitive drilling of facts, concepts or routines; recitation typically sees questions designed to test or promote recall of prior learning, or cues which enable pupils to decipher an answer from clues given in a question; and instruction/exposition involves instructing children about what to do, imparting information, and/or explaining facts, principles or procedures (Alexander, 2015).

- How many times have you observed these types of talk in classrooms?
- How often do your lessons focus solely on these types of talk?

It is not argued that teachers should abandon these forms of talk altogether, but rather, we should ensure that these are not the only ones our pupils are exposed to.

Alexander then describes two additional forms of talk which he suggests are likely to support the principles of dialogic teaching: "discussion" and "scaffolded dialogue". Discussion is defined as "the exchange of ideas with a view to sharing information and solving problems" (Alexander, 2015, p. 30). Dialogue is defined as "achieving common understanding through structured, cumulative questioning and discussion which guide and prompt, reduce choices, minimise risk and error, and expedite 'handover' of concepts and principles" (Alexander, 2015, p. 30). While offering the levels of cognitive challenge children require to achieve the highest quality learning, discussion and scaffolded dialogue require a much greater level of skill and subject knowledge on the teacher's part.

How can we harness the power of dialogue in our teaching?

The observations and arguments above in support of dialogic teaching may be fairly incontestable (particularly if one accessed the large body of research underpinning these ideas), yet actually changing the patterns of talk, or increasing the proportion of discursive or dialogic talk in our lessons, may be easier said than done. One way of promoting increased levels of discussion and dialogue may be to offer more opportunities for small group work (including times when groups are engaged in dialogue with a teacher).

Task structures to promote high quality talk and reasoning

Each of the tasks here function as a scaffold to the development of dialogue and reasoning. Given the benefits of collaborative learning and dialogic teaching described above, they are discussed here in terms of small group tasks (of approximately two to four students), although the structures are also adaptable to whole class or individual activities. These tasks require students to 'do' something, hopefully as a result of 'saying' and reasoning about something. Decisions are often required from students and the tasks are designed to be open-ended in the sense that a range of possibilities could be argued for. These task structures give students opportunities to put forward propositions or arguments and to be presented with counter-arguments or alternative perspectives. Compromise and negotiation are often required to make final decisions on how the task should be completed. These demands require students to articulate their ideas and the reasoning behind them, to weigh up evidence and arguments and to decide upon a solution as a group. They therefore meet the principles of dialogic teaching described earlier, and provide an authentic context in which reasoning is required.

Role on the Wall

<<insert fig 11.2>>

Role on the Wall is a strategy which presents students with an outline of a figure used to represent a particular character. The idea is that students use the spaces provided both inside and outside of the figure to record important aspects relating to the chosen character. Role on the Wall can be used in a number of ways. For example, the inside of the figure can be used to describe the thoughts, feelings, characteristics or personality of a character. This portion is often used to target the 'inner' life or qualities of a character.

The outside of the figure can be used in different ways, depending on the text, character or learning objective. For example, students could record physical characteristics of characters around the outside (perhaps considering possible tensions or harmonies between inward and outward qualities). Alternatively, the outside of the figure could be used to record the environmental sources which affect the character, particularly in terms of their inner lives. For example, life events, relationships or personal hardships/triumphs which contribute to particular emotions or personality traits. Another way to engage with the outer portion is to use this space to record descriptions of the character according to the perceptions held of them by others. Again, this may or may not correlate with what is recorded in terms of their inner qualities. Depending on the task focus, the outside of the figure could also be used as a space to record questions readers would wish to ask a character, or which could form points for discussion within the class.

This task can be used as a whole class activity, with a large 'role' displayed 'on the wall' of the classroom. This would be added to over the course of reading and completed as a shared class activity. Role on the Wall can also be used by individual students, pairs or groups. It can form a one-off task to reflect upon aspects of a particular character in depth. Alternatively, it can be built up over time, deepening understanding of a character over the course of reading and reflecting on what knowledge, impressions and understanding are gained over the course of a text. Additionally, multiple 'roles' or figures can be completed to

compare characters according to their inward and/or outward qualities. For example, completing two 'roles' for the title characters in Mark Twain's classic tale, *The Prince and the Pauper*, may support a deeper understanding of some of the differences between the characters (either in terms of inward characteristics, outward features or both).

Case Study: Role on the Wall comparing 'heroic' characters

Carolyn, a Year 5 teacher, had considered the topic of Greek Mythology during English lessons over the course of a half term. The following four weeks were spent reading, discussing and writing about Arvan Kumar's, *The Heartstone Odyssey*, a text designed to encourage greater appreciation of the need for tolerance and respect while provoking discussion about the issue of racism. The class then began to read and focus on Terry Jones', *The Saga of Erik the Viking*, as the basis for English lessons. Carolyn recognised the need to make links and draw analogies between different texts, as well as to identify broader themes pervading a range of literature. She therefore planned a writing activity asking students to identify which of three selected characters was most heroic. The first character to consider, Theseus, was taken from the Ancient Greek Myth, *Theseus and the Minotaur*. The second character, Chandra, is the protagonist of *The Heartstone Odyssey* and the third character, Erik, is the leading character in *The Saga of Erik the Viking*.

Pupils were familiar with the Role on the Wall task structure. Students were asked to consider a range of texts to answer a broad question so the single outline typical in Role on the Wall was replaced with three outlines. The three characters were compared in terms of their characteristics and personality traits which would support or refute their status as heroes.

Students were asked to complete the inner portions for each of the figures (factors which could be recorded around the outer portions were not considered within this lesson, although there may have been potential to consider whether physical characteristics affect a person's 'heroic' stance). The teacher modelled selecting particular characteristics from a given bank of personality traits and considering which character(s) the particular trait was most applicable to. While the given word bank scaffolded consideration of 'heroic' attributes, students were free to come up with their own characteristics to describe any of the characters. Emphasis was placed on students articulating their reasons for allocating particular characters certain traits, drawing on evidence from the text of where this characteristic was displayed. Students also had to decide whether selected traits might also apply to either of the other two characters, and to what extent, if so. This activity required a continual process of comparison and reflection. Because the three characters shared much in common (and could each potentially be described as 'heroic'), the necessity of providing reasons for choosing a particular trait for a character was apparent. This meant that students were required to engage closely with the texts and then articulate their reasoning with close reference to these texts.

<<insert fig 11.3>>

[End of case study]

This activity required limited writing, with only short notes recorded within the figure outlines. It foregrounded group discussion and promoted a dialogic environment, aims which are valuable in themselves. Yet the activity was also used as a springboard to develop deeper

writing. Arguments and evidence to support them which were initially articulated and briefly recorded were ultimately used to scaffold and support a written task asking students to reflect on the question: 'who was the most heroic?' Students had been given opportunities to develop their own thinking and reasoning, and to hear that of peers, through the group discussion task based on Role on the Wall. They had been required to articulate reasoning, and had most likely encountered alternative viewpoints which they then accommodated into their own views or argued against. All of these processes facilitated their writing, which essentially required transformation of their verbal reasoning into a more formal written structure. This gave students the opportunity to demonstrate one of the 'pupil can' statements for those working at greater depth at end of KS2: "The pupil can: distinguish between the language of speech and writing and choose the appropriate register" (DfE, 2018). While it would not have been possible for all children to work within the greater depth standards, it nevertheless provided those who might have been working within this stage with the chance to address this particular objective (see also 'Deeper Writing at KS2' chapter). Focusing on reasoning through the task structure of Role on the Wall thus helped to promote deeper writing, where reasons for claims were made explicit and where there was close engagement with the texts and characters being compared.

Activity

Show the children an image of Quasimodo, taken from the 1996 Disney film, *The Hunchback of Notre Dame*. Present them with an outline of this character, with space to record ideas inside and around the outside.

Ask children to work in small groups to complete the outside portion of the figure, focusing on the character's physical characteristics. This could be supplemented with a focus on adjectives and descriptive writing. Once children have recorded observations of Quasimodo's appearance, ask them then to complete the inner portion of the Role on the Wall template, focusing this time on his personality traits and characteristics. These observations should be supported with evidence from the story so that reasoning is made explicit.

Ask children to then compare the inward and outward characteristics observed.

- Do they match?
- Do they usually find this pattern of contrast within fairy tales/literature in general?
- Can they think of other examples?
- Can they think of examples of characters displaying the contrasting characteristics in the opposite way (i.e. 'beautiful' on the outside, 'ugly' on the inside)?

This could lead to some interesting discussion and then writing reflecting on what constitutes 'beauty' (either in literature or more broadly), and how it can be (or is) defined. This writing could be supported with reference to examples and evidence from the completed Role on the Wall and from discussion designed to extend consideration after the initial activity.

[End of activity]

Other characters could be used as the basis for this activity or to extend the discussion. *Cinderella* might be interesting in terms of considering the contrast between the protagonist's initial ragged appearance and her inward beauty or goodness. Characters from transformation tales such as *The Frog Prince* might also support this reflection and

comparison. Through the process of scaffolded discussion and dialogue with a focus on promoting reasoning, children should be able to produce deeper, more reflective and more considered writing.

Odd One Out

The basis of this task structure focuses on and supports students' ability to sort and classify. It requires consideration of similarities and differences between a given set of items with the goal of deciding which of a set are similar and can be grouped and which is the Odd One Out based on their dissimilarity to the other group.

There are several formats that this activity can take. In the most basic form, students are presented with three items between which they must discuss similarities and differences before deciding which one is odd. This could be developed using a more systematic approach by employing a triangle format (see figure below) which requires systematic recording of similarities through use of arrows between any two items in the triangle.

<<insert fig 11.4>>

(Higgins, Baumfield & Leat, 2001, p. 19)

Differences can also be noted around the outside of the triangle, located beside the specific item which is distinguished in some way from the other two. This format should also support students' ability to identify alternative solutions to the Odd One Out problem.

Another variation of Odd One Out is to present items in a grid (see Activity). This table format contains a range of items within the cells of the grid. These are then considered in terms of identified similarities and differences before students form groups from the items, based on some identified similarity which distinguishes the group from other items or groups. Again, this focuses on classification and requires students to compare and contrast items before arriving at a decision. It can be used to extend consideration from three items, of which only one is classified as 'odd', to requiring the formation of several groups, which must be distinguishable from the others, or to selecting one odd item or group from a larger set of items.

The basic procedure of Odd One Out, despite variations, requires the following stages, presented in Higgins' *Thinking Through Primary Teaching* (2001) and adapted here to apply specifically to English:

- 1. Present pupils with three items e.g. characters, genres, features of a genre/text, words related to a text, linguistic features.
- 2. Ask them to identify similarities and differences.
- 3. Next, ask them to choose an Odd One Out and give a reason.
- 4. Encourage them to identify a corresponding similarity for each difference (e.g. if Cinderella is the odd one out because she is from a modest background, Snow White and Sleeping Beauty are similar in that they are both royalty).
- 5. Encourage a range of answers.

Step 4 is important in that it requires explicit consideration and articulation from students of the similarities between the two left, rather than just a difference identified in the odd one selected. It should support them to select carefully considered 'odd' items, hopefully developing a more reasoned and justified response to the task.

Teacher modelling of what makes a good answer in terms of Odd One Out is very important. Teachers can help to steer students away from identifying superficial answers, or answers which are arbitrary in relation to the subject (e.g. an answer such as "Cinderella is the odd one out because her name has only one word, whereas Snow White and Sleeping Beauty each have two words in their name" may be considered a superficial answer. This detracts from engagement with features such as character and genre, which may be more important considerations within English lessons).

The Odd One Out activity has many advantages. It requires minimal preparation time and is easy to explain to students. It encourages development of a key mode of thinking, classification, and facilitates group discussion giving a real purpose for classroom talk. The activity encourages students to develop a more precise vocabulary in English. It requires careful thinking and reasoning, both from students and teachers and while it is open-ended, it can be approached systematically. It is suitable across the school age range and is an engaging activity.

Activity

Present children with a 3 x 3 grid of synonyms for 'walk'. For example:

stroll	ramble	prowl
tread	trudge	plod
hike	march	wander

Ask students to form at least two groups containing at least three synonyms each. Students should be able to articulate their reasons for grouping in this way by identifying what makes their chosen words similar to one another as well as stating what distinguishes them from those left over. Students can then decide whether to form an additional group, add synonyms to the two groups already formed, or leave some as 'odd'.

Variation: Give students three of these synonyms contained within the triangle Odd One Out format. They have to decide which two are linked in some way, and which is odd. Ensure that reasoning is clearly articulated.

[End of activity]

Although the Odd One Out activity can be treated as 'stand-alone', this task structure and the high-quality discussion that it promotes can be used as a basis for developing quality writing. For example, it could be used to structure a compare/contrast style text by scaffolding student consideration of similarities and differences between characters, texts, genres or whatever else is made the subject of an Odd One Out task. It could also support certain forms and structures of poetry writing, perhaps with a focus on grouping within stanzas or a contrast presented in the last line of each stanza.

Another way in which Odd One Out can support deeper writing is through its capacity to focus on language, as illustrated in the activity above. Vocabulary can be presented in

groups of three or within a larger grid containing items which students group together based upon a shared similarity. This vocabulary might draw upon synonyms for a particular word, in order to consider the nuances between definitions of seemingly similar words. This then leads to consideration and focus upon the importance of precision within vocabulary choice. A focus on language is evident within all four of the 'pupil can' statements for writing at greater depth at end of KS2. There is a need to have a rich understanding of a wide range of vocabulary and an appreciation for subtleties in meaning between synonyms to support the development of deeper writing.

Odd One Out can also be used to consider which features are important within particular genres. It could support students to appreciate the real similarities and differences between individual texts contained within a genre, or even between genre categories. This would allow them to consider which features are most important or prevalent to genre distinctions.

Case Study: Considering similarities and differences between three texts from the Robinsonade (or 'castaway'/'island adventure') genre

Children in a Year 6 class had recently read Michael Morpurgo's, *Kensuke's Kingdom*. They had read a condensed version of Daniel Defoe's *Robinson Crusoe* in a previous year group and several students offered comparisons between the two stories without being prompted to do so. This led the teacher to focus on the Robinsonade genre, or desert island story as it is commonly known. Since consideration of genre and generic structure requires children to know examples from these genres in order to analyse the commonalities and underlying genre structures and patterns, the teacher supplemented students' experience of this genre by sharing extracts from and a summary of Johann Wyss' *Swiss Family Robinson*. They also watched a film version of this story.

Children were presented with the Odd One Out triangle template containing the titles of the three Robinsonade texts listed above. They had to identify links between the texts as well as features which were distinct to one individual text. Any similarities shared between all three of the texts were recorded in the middle of the triangle. Similarities between any two of the texts (thus rendering the third text the 'odd one out') were recorded along the lines connecting the particular two texts within the triangle format. Children were encouraged to identify links which were important to the development of the particular story, to the Robinsonade genre and/or to the characters within the texts as opposed to identifying more superficial similarities which did not really engage with consideration of the genre and its features. For example, reflecting upon the importance and prevalence to the genre of an ending which sees characters escape from the island would demonstrate high-quality engagement and consideration of genre features as opposed to identification of links such as the number of words contained within the title.

<<insert figs 11.5 and 11.6>>
[End of case study]

The case study above could have been left as a stand-alone activity, designed to elicit reasoning from students and to encourage rich engagement with what they have read and the patterns and structures that they can discern within their reading. However, this activity acted as a powerful scaffold to deeper writing. Children followed this activity by creating their

own narratives within the Robinsonade genre. They were able to make decisions about this writing with much greater consideration and critical reflection as a result of the discussions they had held when participating in the Odd One Out activity. They had a greatly enhanced awareness and understanding of not only the features of this particular genre, which they could then employ within their own writing, but also of the ways in which these features can differ, or even be subverted, within individual texts. The understanding, albeit probably implicit, of the ways in which a text can operate within a particular genre yet also exist as a separate and individual piece was facilitated by considering the similarities and differences between three separate texts which were all distinct and contained distinguishing features yet were still classified as belonging within the same genre category. The level of sophistication that this awareness requires and the subsequent level of autonomy that was promoted within their own writing is surely in line with aspirations to promote writing at greater depth. Indeed, the importance of independence within writing is made clear in KS2 teacher assessment guidance where it is stated that "writing is likely to be independent if it: emerges from... experience in which pupils have had opportunities to discuss and rehearse what is to be written about" (2018, p. 13; this is reflected on further in the Deeper Writing at KS2 chapter).

Conclusion

This chapter has illustrated the importance of developing reasoning within our students. This is greatly supported by adopting a dialogic approach to teaching, in which opportunities for working in small groups are provided. Providing open-ended and engaging task structures for groups to work on not only limits behavioural problems associated with lack of structure or purely discussion-based exercises, but also requires students to demonstrate, practice and refine their reasoning processes. Making the decisions required within these task structures demands clear articulation of the reasoning behind decisions and encourages students to explicitly consider the evidence underpinning their inferences or conclusions, as well as working towards evaluating the quality and strength of this evidence (the features and importance of critical reading skills are considered further in the Non-fiction Writing chapter). By working with others in small groups, students are also given opportunities to consider alternative ideas or counter-arguments, which they can assimilate into their own ideas, or argue against.

The talk within collaborative tasks can sometimes focus upon analysing texts created by others, therefore practising reasoning *about* texts. Yet this also has value for writing. Considering authorial intentions in depth, and evaluating the effects of such decisions within the authors' texts, can help to illustrate to students the decisions involved during the writing process. It can help to make explicit the kinds of decisions that they can make about their own writing and therefore promotes a deeper engagement with their own creative choices.

Further reading

Higgins, S., & Baumfield, Viv. (2001). *Thinking through primary teaching*. Cambridge: Chris Kingston Publishing.

This practical guide explores task structures which can promote and develop children's thinking skills. It applies across the primary curriculum and is supported with examples of how the tasks can be used in varying ways. Photocopiable materials are also provided.

Recommended websites

https://www.robinalexander.org.uk/dialogic-teaching/

Robin Alexander is a seminal figure in dialogic teaching theory and research. His website is accessible and informative and will support teachers wishing to explore the principles of dialogic teaching and learning.

References

- Alexander, R. (2015). *Towards dialogic teaching: Rethinking classroom talk* (4th ed.). York: Dialogos.
- Cooper, J., & Robinson, P. (2000). The Argument for Making Large Classes Seem Small. *New Directions for Teaching and Learning*, (81), 5-16.
- Defoe, D. (2007 first published 1719). *Robinson Crusoe*. Oxford; New York: Oxford University Press.
- Department for Education (2014). *The national curriculum in England: Framework document.*Retrieved from:
 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/38134 4/Master_final_national_curriculum_28_Nov.pdf
- Department for Education (2018). Key stage 2 teacher assessment exemplification materials

 English writing: Working at greater depth within the expected standard: Frankie.

 Retrieved from:
 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/655619/2018_exemplification_materials_KS2-GDS_Frankie_.pdf (accessed 26.1.2019).
- Education Endowment Foundation (2018). Sutton Trust-Education Endowment Foundation

 Teaching and Learning Toolkit. London: Education Endowment Foundation.

 Retrieved from: https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit
- Ford, J. (2004). Theseus and the minotaur (Ancient Greek myths). Brighton: Book House.

- Higgins, S., & Baumfield, Viv. (2001). *Thinking through primary teaching*. Cambridge: Chris Kingston Publishing.
- Holyoak, K. J., & Morrison, R. G. (2005). Thinking and reasoning: A reader's guide. In K. J.
 Holyoak & R. G. Morrison (Eds.), *The Cambridge Handbook of Thinking and Reasoning* (pp. 1–9). Cambridge: Cambridge University Press.
- Howe, C., & Abedin, M. (2013). Classroom dialogue: a systematic review across four decades of research. *Cambridge Journal of Education, 43*, 325e356. http://dx.doi.org/10.1080/0305764X.2013.786024.

Jones, T. (1988). The Saga of Erik the Viking. London: Puffin Books.

Kumar, A. (1988). The Heartstone Odyssey. Derbyshire: Allied Mouse Ltd.

Leighton, J. P. (2004). Defining and Describing Reason. In J. P. Leighton & R. J. Sternberg (Eds.), *The Nature of Reasoning* (pp. 3–11). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511818714.001

Morpurgo, M. (2005). Kensuke's kingdom. London: Egmont.

Trilling, B. & Fadel, C. (2009). 21st century skills: Learning for life in our times. San Francisco, CA: John Wiley & Sons.

Wegerif, R. (2010). *Mind-expanding: Teaching for thinking and creativity in primary education*. Buckingham: Open-University Press.

Wyss, J. D. (2004). The Swiss Family Robinson. London: Signet Classics.