



Teaching Ideas for the Klaus Flugge Prize Shortlist 2020

Set up to honour Klaus Flugge, founder of Andersen Press, this award is for the most promising & exciting newcomer to children's picture book illustration.

Title: Charles Darwin's 'On the Origin of Species'

Author Illustrator: Sabina Radeva

Publisher: Puffin

These notes have been written by the teachers at the [CLPE](#) to provide schools with ideas to develop comprehension and cross-curricular activities around this text. They build on our work supporting teachers to use picture books to enhance critical thinking and develop creative approaches in art and writing. They encourage a deep reading of and reflection on the text, which may happen over a series of reading sessions, rather than in just one sitting. We hope you find them useful.

Reading aloud and key talking points:

- Begin by sharing the text as an object with the children. Pass the book round to the children, so that they can see the artwork close up and the finish of the book with its glints of gold foil on the cover. *What kind of book do you think this might be? What do you think it will be about? Do you like the look and feel of this book? Do you want to read it? Why? Why not?*
- Now, take a close look at the illustrations on the front cover together. *Do you know anything about any of these creatures? Why might they have been chosen for the cover of the book? What do you think they might have in common? What kinds of animals are these? Where might they usually be found? What do you think or feel about seeing such a variety of animals together on one page?*
- Use these conversations to link to the title of the text: '**On the Origin of Species**'. *Do you know what these words mean?* The children will need to understand the meaning of the words '**origin**' and '**species**' to completely understand and appreciate the book, unpicking their etymology and connecting them to other words they already know, so, for example, relating '**origin**' to 'original', and '**species**' to 'special'.
- Look at the author names that you can see on the cover. We are told that this is Charles Darwin's On the Origin of Species, but that the book is retold and illustrated by Sabina Radeva. *What does it mean when a story or text is retold by someone else?* Ask the children if they have ever heard of the name Charles Darwin before, and if they know anything about his life or work. *What might the front cover or title suggest about him?*
- Now turn the book over and look at the back cover and read the blurb on the back page. *Does this give you any further ideas about Darwin and his work?* The children may speculate (if they don't already know) that the portrait included on the back cover is Darwin. *What do you think we can learn about him from what we see and read here? Why do you think the branches of the tree are growing from his hat? What might this suggest? How might this link to '**the great Tree of Life**' mentioned in the blurb?* Open up the book fully, so that the children can see the front and back cover at the same time, and follow the branches of the tree to where the monkey and toucan perch.
- Take the time to clarify the meaning of any technical or unfamiliar vocabulary in the blurb with the children, such as **bacteria**, **adaptation**, **theory** and **evolution**. *What do all these words make you think about? What sort of man do you think Darwin was or what role do you think he had? Many*



children will note the scientific nature of the words and speculate about the scientific nature of his work, linking this to the animals they have seen on the cover.

- Open up the book to reveal the front endpapers. *What do you notice about the creatures here and the way they are presented? Have you seen creatures presented in this way before? Where was this?* Children may have been to a museum and seen specimen trays, or seen other scientific books or posters where specimens are presented like this. Take time to look at the book plate in the bottom left corner, which is entitled 'Specimen No'. Talk about the word specimen together. *What does this mean? How do you think this connects to the work of Darwin? What more does it make you think about what this book might be about, or the kind of book you think it is?* Move on to looking at the other specimens that can be found on the back endpapers. Allow the children time and space to look at all of these specimens. *Do you recognise any of these beetles and butterflies? Do any stand out to you, do you have a favourite? Why? How do you think they are the same or different?* Look at the way they have been labelled: *what does each 'label' tell you about the insect that is shown? How or when might you use it?* Each insect has a common name and a Latin name. The naming system was created in 1735, so that scientists from different countries had a common language to share their research. Latin was the language chosen to label every plant and animal in the world. You could go on to research the Latin names of some of the creatures you know, e.g., horse *Equus ferus*, dog *Canis lupus*, or cat *Felis catus*.
- Now, turn the page to look at the instruction above the publication details, where it explains that these creatures can all be found and identified in the pages of the book. Sabina Radeva, the author/illustrator explains she has included these insects in tribute to Darwin's interest as an observer and collector. Challenge the children to spot the different insects as they read the book. You could give a copy of the endpapers on which they can tick off the beetles and butterflies as they find them.
- Read the first double page spread and ask them to consider what kind of a book this might be, and how it might be like other books they know: *have you ever read any other illustrated non-fiction books? What were they like, and how do you think this book will be the same and different?* This book is one of a small but distinguished group of non-fiction titles to have been shortlisted for the Klaus Flugge prize. It will be valuable to retain many approaches you would use in exploring a fictional picturebook, however, such as responding to illustration and reading aloud, so that children experience the different voice and style of a non-fiction title; but it will also be interesting to discuss how it is similar to and different from other titles they already know, including perhaps other shortlisted titles from this year's prize.
- Re-read and explore the spread in greater detail. *How do the text and illustrations work together to show the passing of time, and the journey of life over time?* Allow the children time and space to look at the different pages on the left and right hand sides of the spread, and to think about the changes that occur across the spreads and to explore the knowledge they already have about evolution. *What creatures do you recognise? Are they all still in existence today? How do you think some of these animals changed over time?*
- Read the next page, exploring the creation story. *Do you recognise the characters in this illustration? What details do you notice about the scene? What do you already know about this story?* You could spend time looking at different examples of creation stories. Allow children of



different faiths and backgrounds to share examples of creation stories that they know and look for common factors across these stories, such as the creation of people, animals and the world and the ways in which these are different. In separate read aloud sessions, you may wish to read and explore a wider range of creation stories from a range of faiths and cultures to broaden children's experiences. You may then be able to categorise these into stories with different patterns.

- Share the next page, which shows an alternative account, and introduces two features of the book, quotation and footnote. Read the text aloud and consider the impact of the words in the first sentence: **'but there were a few clever and curious scientists who challenged this idea.'** How does this sentence show how the author feels about these scientists? What do the choices of **'clever'**, **'curious'** and **'challenge'** make us think about these people? Read the rest of the text on the page and allow time and space for children to reflect on what they have heard. How does Sabina Radeva use words and pictures to show that some scientists believed that animals change over time, look different in different places, and that the differences result from changing in useful ways? Why do you think these ideas may have been at odds with the creation stories you have heard? Look at the other text element on the page, the footnote. What do you think **'See Appendix VI'** means? Support children in navigating their way to the footnotes and appendices and how to use them.
- Turn to share the next double-page spread introducing Charles Darwin. What do you think is happening here? Where is your eye drawn? Do you recognise any of the elements from the front or back cover or endpapers? How do we see Charles Darwin pictured? How does this differ from the image of him we saw on the back cover? Come back to re-read and explore the text on the page. Clarify children's understanding of the word naturalist and look at what the work of a naturalist might encompass. Which words and phrases convey how he felt about his travels and work? What do you think it would have been like to travel as he did in those times? How do you think it would feel to see new animals for the first time? Why do you think some of the creatures have their names written beside them, such as **'cracker butterfly'**, **'Rhea Darwinii'** and **'Fossils'**?
- Turn to share the next spread in which we see Darwin's home life and the long journey to publication. Allow time and space for reflection. What more do you find out about Charles Darwin from this spread? What are you told in the text and what can you infer from the illustrations? What do you learn about his family from seeing them depicted in this way? Which room in the house has the illustrator chosen to focus on here? Why do you think she has chosen this room in particular? What more do the objects in the room tell us about Darwin? Why do you think the greenhouse is specifically mentioned? What do you think his **'intriguing experiments'** involved? You might wish to compare Sabina Radeva's illustrations with photographs of Down House at <https://www.english-heritage.org.uk/visit/places/home-of-charles-darwin-down-house/>. How faithfully do you think the illustrator has captured Darwin's home? Do you think a photograph or an illustration is more evocative? Why?
- Share the next three double-page spreads, looking at variation in rabbits, dogs and pigeons. Do you find the illustrations make Darwin's thinking clear, for example comparing the pairs of rabbits — taller vs shorter and so on? Add **'species'** and **'variation'** to the list of words that you are clarifying with the children. Support the children to look at the different typefaces that have been used across these pages. How do you know when the author is using her own voice, and when she is quoting Darwin directly? Why do you think it is important to hear and attribute Darwin's own



words? How does the background of the running wolves ‘**many howling moons ago**’ compare with the flowery meadow in which the rabbits frolic, and the neutral background of the six pedigree dogs? Why do you think the illustrator chose to contrast them in this way? What characteristics or personalities do you think the wolves and the different domestic breeds might have, and how does Sabina Radeva capture these in her illustrations? Do you have a dog yourself, or a favourite type of dog? How do you think that particular breed came to be as it is? Take a child’s example and consider how it might have been bred for hunting, racing, fighting or for aesthetic reasons. Finally, consider the pigeons: how has Sabina Radeva used illustration and layout to show Darwin’s theory in action? They might compare the flying fluttering mass on the left with the ordered rows of the right, all facing the same way and with their names labelled underneath, and so on.

- Turn the page to consider the next spread. *Why do you think the illustrator has chosen to move from a close up focus on the flowerbed to a wider perspective across the farm? How does the close up example help us to understand the big idea of selection? What does the wide shot tell you about the potential choices that the farmer might make? Can you think of other choices gardeners or farmers might make in the kinds of plants or animals they cultivate?* Support children in considering other desirable properties we might want to encourage, e.g., scent, yield, flavour, hardiness, resilience, speed, and so on.
- Turn the page to consider ‘**Variation under Nature**’: *How do the series of images of the finches help us to understand the ideas presented? How does the variation in beak size help the finch population as a whole? What skills do you think Darwin must have needed to observe this tiny difference in these birds?*
- Turn the page to share the next spread. *What does this spread make you think about? How does it make you feel? What makes you feel this way? How does the spread convey the movement of the animals and the threat posed? How does the body language and facial expressions convey their emotions? What do you think is about to happen, off the page?* Now, read the text aloud. *How does this sit with the illustration? What do you think the phrase ‘**struggle for existence**’ means? What do you see framing the central scene of lion and zebras? Do you think the foliage and insects also take part in the struggle? How?*
- Turn to share the next two pages, of elephants covering the earth and the birds’ struggle to survive. Allow time and space for reflection. *Why do you think the illustrator chose elephants in particular to frame the quotation from Darwin? Would you have chosen the same creature? Which other creatures might also exemplify the ideas shared here? Why?* Now focus on the opposite spread. *What do you see the birds doing in the various scenes; why do you think the illustrator has chosen these particular glimpses into their life? What does the quotation add to your understanding of the struggle, and how does it relate to the dead bird? Why do you think the snug cottage with smoking chimney is included in the illustration, what does it add to our understanding?*
- Share the next double-page spread — ‘**Natural Selection**’ —and consider how the illustration, layout, Sabina Radeva’s text and Darwin’s quotation work together on the page. *What do you think is happening in this spread? What do you notice about the various elements it contains, from the small scenes within the illustration, to the words of the author and her inspiration?* Take in all the details of the illustration: *what types of ‘**helpful differences**’ and adaptations can you identify?*



- Continue reading the rest of the book, introducing and explaining Darwin's theory. *How do Sabina Radeva's illustrations make the concepts accessible? Do you find the combination of quotation, explanation, big picture and explanatory detail effective? What do you think these illustrations achieve that words alone and photographs cannot?*
- Consider how Sabina Radeva has combined quotation, explanatory text and illustration to address two final aspects of the theory — '**Migration**' and '**Mutual Affinities of Organic Beings**' — on the next three spreads. *How do the layout and content of these pages support your understanding? How do the different forms of illustration — including diagrams, maps, observational drawing and anatomical study — help you to understand the concepts? How successful is Sabina Radeva in making his ideas accessible and explaining them clearly? Do you think you could use this book as a resource to explain them to someone else?*
- Finally, consider the double-page spread sharing the evolution of man across the page towards Darwin in the garden of his house, framing his challenge to future researchers. *Why do you think the illustrator has chosen this illustration to summarise the ideas at the end of the book? How does it fit with Darwin's words? What do you think these words mean?*
- Finally, share Darwin's words about the wonder and beauty of the natural world, and the page of '**Conclusions**'. *How do the quotation framed by the variety of wild nature, and the '**Conclusions**' framed by domesticated animals, work together to bring the book to a close? Why do you think Sabina Radeva chose to end her book in this way? Do you find it effective? Why? Why not?*
- Signpost the children to the remaining pages of the book; the '**Author's Note**', '**Appendix**', '**Misconceptions**', '**Glossary and Recommended Reading**', '**Dedication and Credits**'. *Have you seen materials like this in other books you have read? Why do you think they are included in a book of this kind? What do they add to your experience, enjoyment and understanding of the book?*
- Re-read the entire book from the beginning to the end. Allow the group to begin to explore their responses to it through booktalk with the help of what Aidan Chambers calls 'the four basic questions'. These questions give children accessible starting points for discussion:
 - *Tell me...was there anything you liked about this story...?*
 - *Was there anything that you particularly disliked...?*
 - *Was there anything that puzzled you...?*
 - *Were there any patterns... any connections that you noticed...? Did it remind you of anything else you've read or seen...?*
- The openness of these questions unlike the more interrogative 'Why?' question encourages every child to feel that they have something to say. It allows everyone to take part in arriving at a shared view without the fear of the 'wrong' answer. As children reply it can be useful to write down what they say under the headings 'likes', 'dislikes', 'puzzles' and 'patterns'. This written record helps to map out the group's view of the text and the important themes and ideas around the story from the children's perspective and is a way of holding on to ideas for later. Asking these questions will lead children inevitably into a fuller discussion than using more general questions. You may, for example, ask the children if they had favourite parts or spreads in the book, and why this was.
- Extend the children's thinking through more evaluative questions, such as: *Who do you think would like this book? Why?* Read the page at the end '**About the author.**' *Why do you think Sabina Radeva*



chose to write this book? What do you think her training and experience as a scientist (molecular biologist), graphic designer and illustrator contribute to the book?

- Leave copies of the book in the book corner for the children to revisit and re-read in independent reading time, by themselves or socially in a group.

To continue work around the book:

- Collect together a range of art materials to allow the children to engage in exploring illustration, for example: cartridge paper, sketching pencils 2B-4B and coloured pencils, oil pastels and wax crayons. You may like to visit Sabina Radeva's website at <https://www.sabinaradeva.com/> to see her other work and gain insights into her artistic process and other activity.
- Sabina Radeva has chosen to pursue projects combining art and science. Isabel Thomas also uses the picturebook format to popularise complex scientific concepts: *Moth: An Evolution Story*, illustrated by Daniel Egnéus (Bloomsbury) offers a beautiful complement to Sabina Radeva's book.
- Children could find out more about Darwin's life and work from Mick Manning's *What Mr Darwin Saw*, illustrated by Brita Granström (Frances Lincoln) and about evolution more widely in Anna Claybourne's *Amazing Evolution: The Journey of Life*, illustrated by Wesley Robins (Ivy Kids). They can also explore biodiversity in two books by Nicola Davies: *The Variety of Life*, illustrated by Lorna Scobie (Hodder) and *Lots: The Diversity of Life on Earth*, illustrated by Emily Sutton (Walker). If the Zallinger-inspired final spread interests them, they can also explore human evolution at <https://www.nhm.ac.uk/discover/human-evolution.html>.

This sequence of activities was designed in partnership with CLPE. CLPE is a UK based children's literacy charity working with primary schools to raise the achievement of children's reading and writing by helping schools to teach literacy creatively and effectively, putting quality children's books at the heart of all learning. Find out more about their work, and access further resources and training at: www.clpe.org.uk