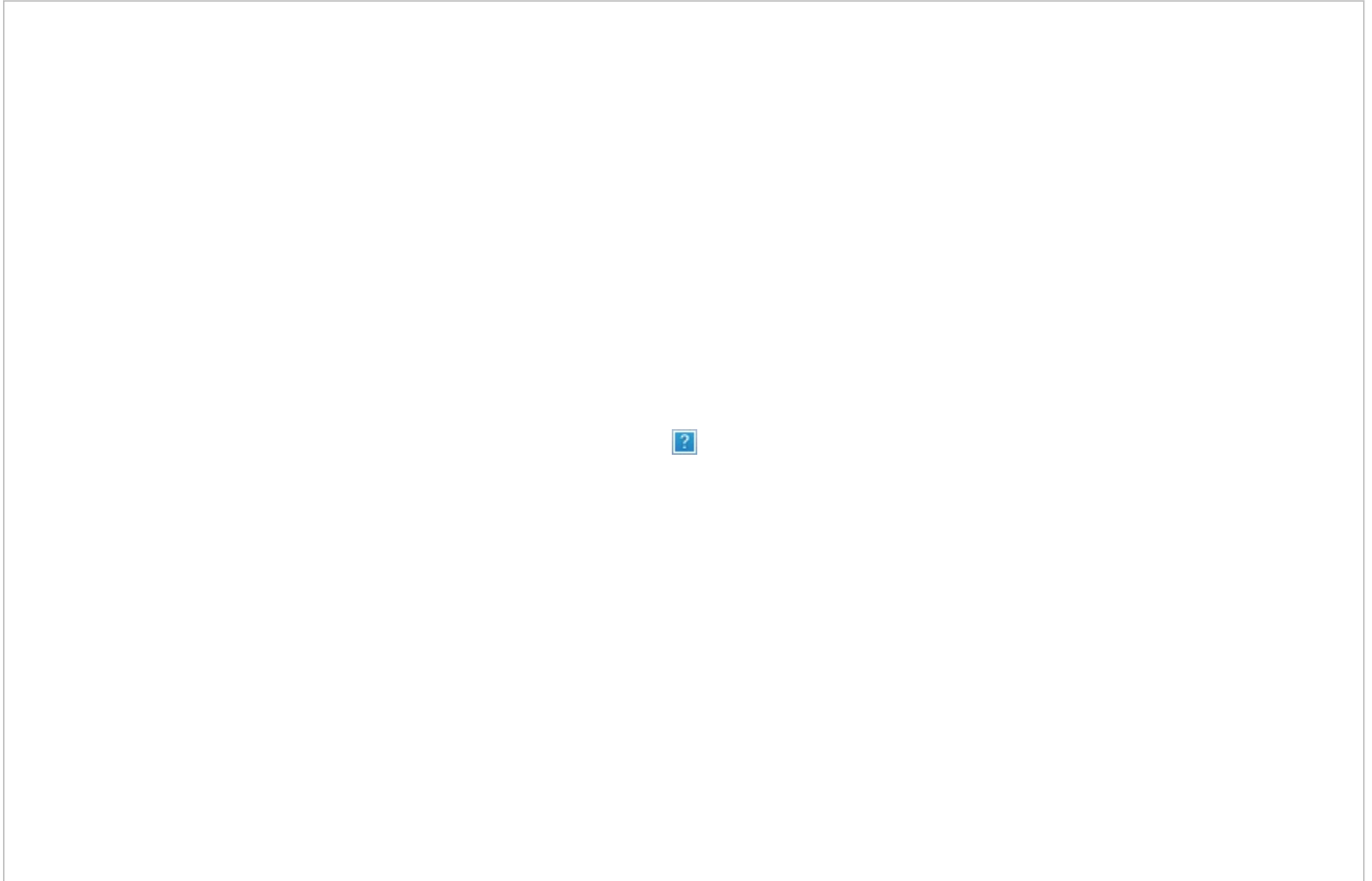


# Combining verbal and graphical representations

Another way to support learning is by combining verbal explanations and graphical representations. You may hear this referred to in educational research as the principle of Dual Coding.

## Why is this a useful when teaching new content?

When done effectively, combining a verbal explanation with a relevant diagram or visual representation reduces the load on the working memory as it makes use of both the visual and auditory paths in the brain. It is particularly useful when the concept is hierarchical, such as an organisational structure, or has organisations and connections that are not linear (Caviglioli, 2019).



Open image in a new tab: [Simplest model of the mind](#)

This course took advantage of this principle when you were introduced to the Willingham model of the mind. As the concept is not linear and relies on the relationship between the different elements of the mind, the concept would have been harder to explain and understand using only text.

Listen to teacher Jon Hutchinson talk about how he has learnt to effectively combine verbal explanations and graphical representation in order to support teaching and learning and make notes using the [notes tab](#) (or your own notebook) if you wish.



Direct Link: [Combining verbal and graphical representations - Jon Hutchinson, Reach Academy Feltham](#)

Transcript: [Combining verbal and graphical representations - Jon Hutchinson, Reach Academy Feltham](#)

In the video, Jon shared some examples of how his school have combined verbal explanations and relevant graphics to support pupils' understanding of new knowledge. The Early Career Framework highlights that the graphics must be 'relevant', and that simply combining any image with your explanation will not be effective. The graphic must serve a function and help support pupils to process information quickly.

## Combining verbal and graphical representations in action

Take a moment to see how a teacher combines their verbal explanation with a graphical representation in action by watching the most relevant video for your phase below.

### Early years

This Early Years teacher is using graphics to support her explanation of how to do 'good sitting' on the carpet.



Direct Link: [Combining verbal and graphical representations - Early Years](#)

Direct Link to an audio described version of this video: [Combining verbal and graphical representations - Early Years](#)

(this link opens in a new window/tab)

### Primary

This KS2 teacher uses a timeline to help place the Vikings in their historical context.

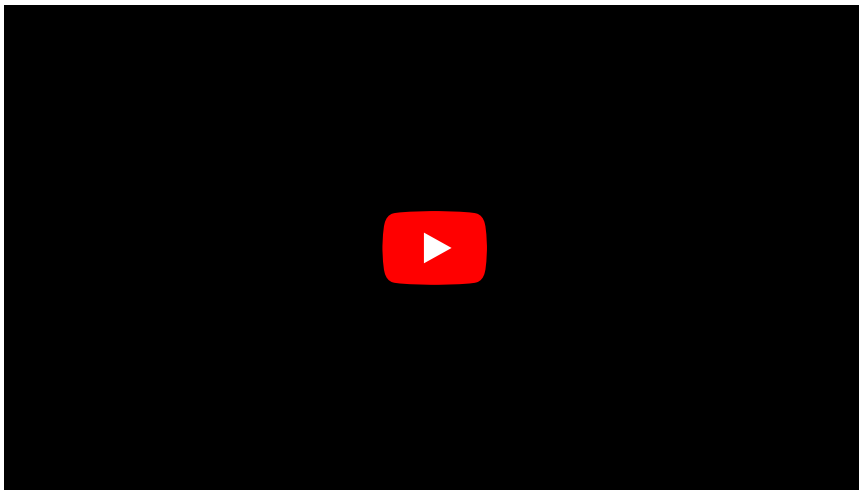


Direct Link: [Combining verbal and graphical representations - Primary](#)

Direct Link to an audio described version of this video: [Combining verbal and graphical representations - Primary](#)

## Secondary

The teacher in this KS3 science lesson helps organise pupils' thinking and makes connections using a diagram.

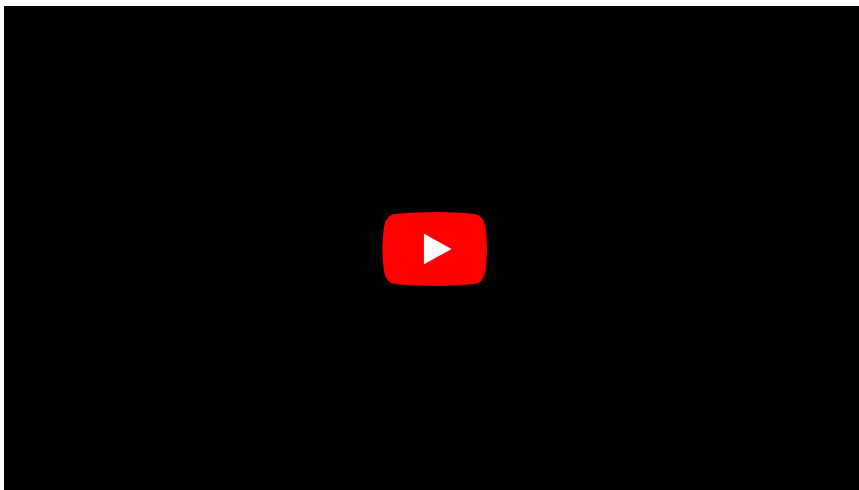


Direct Link: [Combining verbal and graphical representations - Secondary](#)

Direct Link to an audio described version of this video: [Combining verbal and graphical representations - Secondary](#)

(this link opens in a new window/tab)

## Specialist



Direct Link: [Combining verbal and graphical representations - Specialist](#)

Direct Link to an audio described version of this video: [Combining verbal and graphical representations - Specialist](#)

[\(this link opens in a new window/tab\)](#)



## Over to you!

Consider an upcoming explanation, or an explanation that you have recently taught to the class and record your answers to the following questions using the [notes tab](#) (or your own notebook).

- Where could you effectively combine a clear verbal explanation and relevant graphical representation to support pupils' understanding?
- How will it support your explanation and reduce the load on the working memory?

You will have the opportunity to discuss this with other ECTs in the seminar. Be prepared to share your responses to the above questions.