


Section 4: Teaching

Section 4 should be used in conjunction with Section 5: Resources and, particularly, the *Interactive Progression Pathways Tool*, which contains links to a wealth of great resources.

Which programming languages should I use?

Although, as you know, programming isn't the be all and end all of computing, it is an important aspect of the 2014 curriculum and you will need to decide which programming languages you are going to use. The *Choosing a programming language* video offers six key questions you should ask yourself before making your decision.

		Book	CD-ROM	Website
	Video: <i>Choosing a programming language</i> © Hodder Education 2014. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.		✓	✓

What does a good computing lesson look like?

The *Lesson observation form with prompts* planning sheet provides a pro-forma, based on Ofsted's Evidence Form for school inspections, that can be used during a lesson observation to ensure a focus on computational thinking, and the *Completed lesson observation form* information sheet is a completed example. A link to Ofsted's *Note to inspectors: use of assessment information during inspections in 2014/15* is also provided.








And, of course, don't forget everything you already know about teaching a great lesson, including ensuring there is progression and providing students with an opportunity to recap their learning.

There is a range of techniques for teaching computing and several are presented here:

- The *Orange Game* video from CSUnplugged illustrates how theory can be taught away from a computer using kinesthetic activities.
- The *Paired programming* video shows how students can collaborate and develop resilience whilst writing and debugging their programs.
- The *From graphical to text-based programming languages* information sheet illustrates how to effectively manage the transition from graphical to text-based programming languages.

Techniques are constantly evolving. Please take an active part in the discussions at CAS online to keep up with the latest developments.



The *Creative computing in action* video illustrates how all this can be put into practice in the classroom.

		Book	CD-ROM	Website
	Planning sheet: <i>Lesson observation form with prompts</i> © Crown Copyright 2014. Contains public sector information licensed under the Open Government Licence v3.0.	✓ Page 30	✓	✓
	Information sheet: <i>Completed lesson observation form</i> © Crown Copyright 2014. Contains public sector information licensed under the Open Government Licence v3.0.		✓	✓
	Link: <i>Note to inspectors: use of assessment information during inspections in 2014/15</i>		✓	✓
	Video: <i>The Orange Game</i> © CSUnplugged. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.		✓	✓
	Video: <i>Paired programming</i> © Crown Copyright 2015. This content is free to use under the Open Government Licence v3.0.		✓	✓
	Information sheet: <i>From graphical to text-based programming languages</i> © Crown Copyright 2015. This content is free to use under the Open Government Licence v3.0.	✓ Pages 31-2	✓	✓
	Video: <i>Creative computing in action</i> © Crown Copyright 2015. This content is free to use under the Open Government Licence v3.0.		✓	✓

How do I structure a good computing lesson?

The *Lesson plan template* highlights the key things to think about when planning a lesson and provides a structure that you can adapt to meet your needs and the needs of your students. We have also included a scheme of work from the Digital Schoolhouse, showing the lesson plan template in action. Of course, as your subject knowledge and expertise grows over time, you can simplify the planning process but it is important to ensure that you continue to emphasise the links to computational thinking as well as progression.

While planning your lessons, think about the impact of the activities on your classroom layout. For example, do you need to push the desks to the wall to create enough space to allow your students to get the most out of an unplugged activity?

		Book	CD-ROM	Website
	Information sheet: <i>Lesson plan template</i> © Digital Schoolhouse 2014. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.	✓ Pages 33-4	✓ With and without speech bubbles	✓ With and without speech bubbles
	Activity: <i>Shapes calculator scheme of work</i> © Digital Schoolhouse 2014. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.	✓	✓	✓