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Pearson Edexcel

Resource transitions guide for Read School who switched to Pearson Edexcel GCSE Computer Science

Resources

The following resources are used by Chris Sharples, Head of Computing, at Read School who has switched to Pearson Edexcel GCSE Computer Science.

Free Pearson Edexcel resource

- Syllabus Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Computer Science (1CP2)
- Getting Started Guide
- PLS/Pearson Edexcel Programming Language Subset PLS V3
- 2x Paper 1 and Paper 2 Sample Assessment Materials and 3 specimen sets
- Detailed lessons for both theory and practical's – schemes of work

Paul Long

- Specification comparisons
- The Ultimate Walking Talking Mocks
- My basic comparison sheet
- Detailed comparison

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PG Online

I had already invested in the AQA PG Online resources and they kindly gave me a swap to edit the new Pearson Edexcel resources for a very reasonable transfer price. I think the PGO resources are excellent quality and I have used them from the first KS3 units. The structure of six or more lessons and then the unit test works very well, and I find the resources extremely easy to put onto Google classroom.

I have started to traffic light the content into green, amber, and red, with a rough correlation to grades 3/4; 5/6; and 7/8. As all of our resources go onto Google Classroom, I also have to keep an eye out for worksheets that have to be converted to Google slides for more interactive use by the students e.g., needing to draw arrows on diagrams. I have also purchased the Sample Examination Papers 1CP2 (Pack of 4) to supplement the three Pearson Edexcel ones and I am using both the actual 2022 papers for Mocks.

Books

I started with PG Online's ClearRevise books. Some of my students used these to great effect leading up to their theory mock. I have just given out copies of the Pearson Edexcel REVISE GCSE Computer Science Revision Workbook for my students to be using in the lead up to their exams with a fortnight on each unit.

Trinket

I have created all my practice courses on Trinket.io's Connect Plan including Nicola Wilkin's Python by Example: Learning to Program in 150 Challenges (used with permission - thank you NW). I use the www.101computing.net website plus their two Python books which are all sorted into Basic, Intermediate and Advanced challenges and are excellent for context and for differentiation.

Craig and Dave Videos

There are 87 excellent free videos matched to every syllabus learning objective. If I was starting from scratch, I would definitely consider their Smart Revise resource.

Isaac Computer Science for Pearson Edexcel GCSE

This is a great overview of the Edexcel GCSE level Computer Science specification, with links to the Isaac Computer Science topics.

Quizlet

A list of flash cards matched to Pearson Edexcel. I encourage my students to revise these as knowing the specialist vocabulary is so important to understanding and answering the questions. Seneca is also recommended but I leave this to student choice.

Gresham videos

I like students to understand the wider context even if it is outside the syllabus as it helps their overall understanding. Prof. Richard Harvey does an excellent job with this series of videos, and there are transcripts for five out of six of the lectures to save you time too.

18x free Pearson Edexcel CS Interleaving Sheets via Computerscienceuk

I have explained interleaving many times when I have delivered the NCCE course on Higher attainment in GCSE computer science: meeting the challenge of exams and I consider it vital that Y11 students constantly use retrieval methods to get content into their long-term memory. I contacted Sam and he generously made available his OCR 6-a-day LITE resources and I adapted them as 4 a day for Pearson Edexcel and returned 18 sheets for free download from his excellent website. I also made a tracking sheet to check what is covered. I use these in Year 11 leading up to Computer Principles / Theory Paper 1 Mock.

Pete Dring's Live with Code site

Pete has been involved since the start with Pearson Edexcel and it is well worth a look through all of his free resources. I link in this tracker to the Paper 2 practice resources – 3 example tasks for each of the 6 sections.

NCCE Hubs

Get in touch with your local NCCE hub and consider their training if you have not already done so.

Facebook Group

Pearson Edexcel GCSE Computer Science Facebook group. Throughout the last year I would like to thank colleagues on this group who have always provided expert help when I needed it.

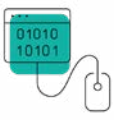
Half Termly schedule for a full transition in Year 11

I teach 3 lessons a week, each of 55 minutes. I vary when I teach 2:1 Theory/Programming or 1;2 Theory/Programming

	Theory	Programming
Lead up	We had finished the summer term having covered AQA Unit 5 - Networks and I had set the unit test for the start of Y11. First Mocks (Theory) were going to be in November using the set 2022 Paper 1, the week after half term, with second Mocks (Practical) in February 2023, using the set 2022 Paper 2.	We had covered all Python programming up to the more complicated 2-D arrays.
	I created a new Google Classroom and populated it with Pearson Edexcel resources.	
Half Term 1	Detailed read through of "Syllabus at a glance" section of the syllabus. Created a Basic comparison sheet and then a quick view of Paul Long's syllabus differences / new schedule issued. I demonstrated new revision slides for Unit 4 Networks. These included new links to PG Online's Pearson Edexcel slides and Quizlets, with new Learning Objectives (LOs). However, I left in the AQA LOs so that students could be clear about the differences. I created 18 Interleaving sheets for units 1-4. Each week I issued a new set of revision slides (for each unit 1,2,3) to lead up to the Mock exam. I made explicit the main differences and highlighted those slides. We did not cover Unit 5 Impact, but I gave them resources on the specific question in the Mock (Bias in Police AI systems).	We went through what the PLS was all about. We did 2 lessons a week on practical, starting with a unit on Python Turtle. PG Online. We started using IDLE or Thonny to start mimicking exam conditions, as I used Trinket throughout Year 10.
		It's useful to show clips from "The Dawn Wall" (available on Amazon Prime) to explain about teamwork for learning programming.

Half Term 2	Mock Exam. Review, then completion of revision slides for units 1-4.	More work from PG Online programming.
Half Term 3	Minimal revision Units 1-4 as I worked on their confidence with programming.	I issued the first set of SAMs from the Pearson Edexcel website and a mapping sheet to show progress. This was for the Year11s to see what an exemplar paper would look like. I then shared Pete Dring's Paper 2 practice resources, and I asked one of my best students to RAG (Red Amber Green) them with the most useful one at the top.
	The students learned the PLS terminology and practised with the two practice SAMs.	
Half Term 4	PG Online Unit 5 - 4 topics.	Task on Readability from the good Programming Practice Guide v1.2. This updated version was the missing link for some of the best Year 11 programmers.
Half Term 5	I analysed the previous unit 5 Impact questions and set research for the current topics. We applied the work from PG Online. I gave the PG Online sample paper 1A for practice and kept back 1B for exam conditions.	I gave the PG Online sample paper 2A for practice and kept back 2B for exam conditions I used some of the Pearson Edexcel paper 2 resources for practice for the harder questions.
Half Term 6	18th May Paper 1	25th May Paper 2
	Exams two weeks in	

Read the full case study and find why Read School switched to Pearson Edexcel GCSE Computer Science:



Find out more about switching to Pearson Edexcel GCSE Computer Science