Planning & Assessment

Islington computing leads

Jane Waite

Katy game me a problem to help with

Handout 1

- Teachers are finding assessment of computing difficult.
- Can we find out what aspects and how to help.

Approach

Handout 1

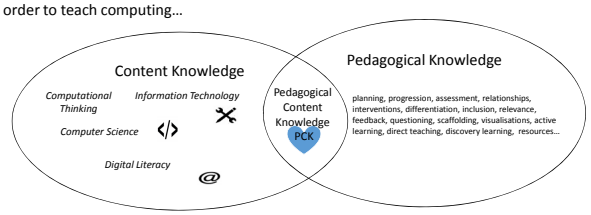
1. Ask you what is most difficult
2. Provide a means to review assessment for computing - PCK
3. Evaluate computing planning and assessment using PCK
4. Gather and suggest assessment approaches and how these can be supported.

Is assessment more difficult:

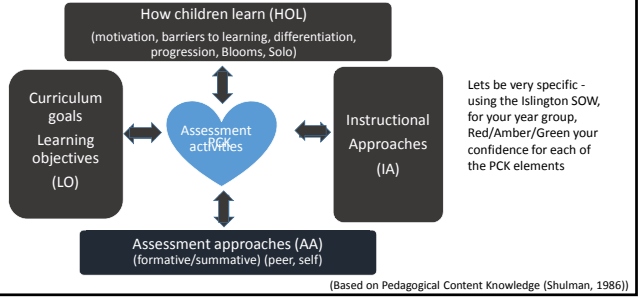
- For IT, DL or CS?
- For a particular year group?
- Formative or summative?
- For computing than other subjects?

Lets vote!

In order to teach computing…



Adapted version of pedagogical content knowledge (PCK) (Shulman, 1986)



Lets be very specific - using the Islington SOW, for your year group, Red/Amber/Green your confidence for each of the PCK elements

(Based on Pedagogical Content Knowledge (Shulman, 1986))

Islington Computing

LO IA HCL AA

	Housekeeping:	Programming:	Multimedia & Word processing	Communication & Collaboration	Digital Media	Data
Year 5	Logging onto computers/devices Using LGfL username and password in school and at home Accessing subscription services such as PurplePlash, Google Classroom LO IA HCL AA	PurplePlash 2Code Code.org Scratch Islington Y5 Unit 1 (Quiz) SOCIT Kodu Unit LO IA HCL AA	Choose from a range of packages to create presentations. Organise, refine and present information for a specific audience. (LGfL J2E, Publisher, PowerPoint, Word, Scratch 2Create) Evaluate their own and each other's work through peer assessment (Publish and add comments on blog) Develop confidence using both hands when typing. Create range of genre using Book Creator incorporating multimedia Online quiz generator (e.g. Kahoot!)	Online publishing: creating and commenting on each other's blogs/work (See 'blogging Unit' planning). Visit a variety of school blogs, discuss & compare Online research: use search technologies effectively including copyright Complete an online quiz or survey, e.g. LGfL e-safety survey LO IA HCL AA	Graphics: Creating digital artwork and interactive webpages for blog (J2E on LGfL) Video & Sound: Film project in groups (plan a video, use different filming techniques and sound effects, present and evaluate work to audience) - iMovie, Movie Maker, Audio Network, GarageBand Music/Sound: Radio Program project (listen, evaluate, plan and write a script. Rehearse and record voice. Create and add backing track and sound effects.) Audacity, Audio Network LO IA HCL AA	Spreadsheet modelling Create a budget for a school tuck shop/ planning class party Change the data and formulae in a spreadsheet to answer 'what if ...?' questions and check predictions LO IA HCL AA
Switched On Online Safety	**Unit 5.1 - We are Year 5 rule writers** Reviewing and editing our online safety rules LO IA HCL AA	**Unit 5.2 - We are responsible for our online actions** Understanding the LO IA HCL AA	**Unit 5.3 - We are content evaluators** Understanding advertising and endorsements online LO IA HCL AA	**Unit 5.4 - We are protecting our online reputation** Developing strategies to LO IA HCL AA elves	**Unit 5.5 - We are respectful of copyright** Understanding and LO IA HCL AA ows	**Unit 5.6 - We are game changers** Understanding how games developers make mo LO IA HCL AA
Barefoot	Network Hunt Viking Raid Animation LO IA HCL AA	Investigating Inputs (Scratch) Investigating Outputs LO IA HCL AA	Maths Quiz – Selection (Scratch) Solar System Simulation (Sc LO IA HCL AA	Kodu Tinker Use selection (Kodu) LO IA HCL AA	Maths Quiz – Variables (Scratch) LO IA HCL AA	Classroom Sound Monitor (Scratch) LO IA HCL AA

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How children learn (HOL)
(motivation, barriers to learning, differentiation, progression, Blooms, Solo)

Curriculum goals
Learning objectives
(LO)

Assessment activities

Instructional Approaches
(IA)

Assessment approaches (AA)
(formative/summative) (peer, self)

Spot patterns! Where is the problem?

(Based on Pedagogical Content Knowledge (Shulman, 1986))

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Assessment approaches

How do you assess? What support do you need?

Assessment Approaches

Approach	Supported by
Direct questions	Key Questions
Observations	Checklists (assessment grids) ✓
Assess work	Example material to compare to (met-, met, met+)
Quizzes/Tests	Sample answers/ differentiated versions
End of topic tasks	Assessment grids ✓ Moderation opportunities
Peer/Self assessment	Pupil I can statements Pupil booklets ✓ I can cards✓

Which do you use?

What do you need help with?

What is missing?

Islington Computing
</> Computer Science

National Curriculum (by the end of KS2)

Unplugged:

- Solve problems by decomposing them into smaller parts
- Use logical reasoning to explain how some simple algorithms work

Coding/Programming:

- Detect and correct errors in algorithms and programs
- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems
- Use sequence, selection and repetition in programs
- Work with variables
- Work with various forms of input and output

Key Skills/Objectives:

- I can plan and enter a sequence of instructions o a robot/sprite to achieve specific outcomes
- I can test and improve/debug programmed sequences
- I can use loops (repeat/forever) to achieve solutions to tasks
- I can use computational thinking to solve open ended problems
- I can talk about algorithms planned by others and identify any problems and the expected outcome
- I can explain how algorithms work, predicting outcomes and debugging

Are the booklets working? If not why?

Assessment Yr 3-4 Scratch (Drawing shapes and Etch-a-Sket

Name:_____

Skills and success Criteria	Your Marks	Tea asse
I can create new sprites	☹ 😐 🙂 😃	
I can upload different backgrounds	☹ 😐 🙂 😃	
I can use the _____ block to start the algorithm running	☹ 😐 🙂 😃	
I can use loops or _____	☹ 😐 🙂 😃	
These are some of the blocks that tell the program to repeat things:	☹ 😐 🙂 😃	
I can create simple algorithms to draw shapes on the screen	☹ 😐 🙂 😃	
I can place or direct the sprite		

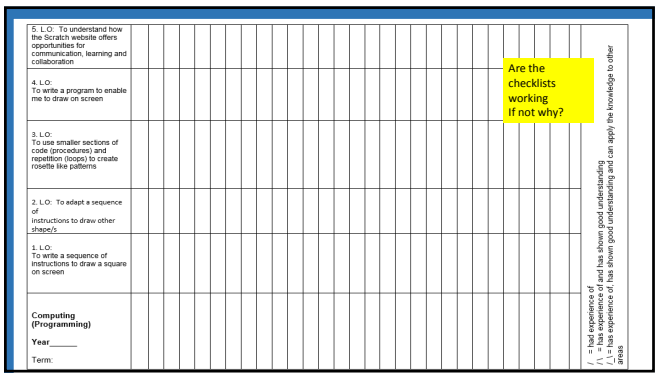
In Computing I can...

Year 2

Name: _____

	Pupil Assessment:	Teacher Assessment:
Computers:	☐ I can recognise how others use technology outside of school	
Using computer:	☐ I can find, open, edit and save files I am working on ☐ I can use different software programs and discuss the benefits of their use	
E-Safety:	☐ I know I need to keep my personal information private	
	☐ I can predict the behaviour of a programmed toy, clearly relating each action to part of an algorithm ☐ I can create a simple program to perform a task	

Are the self assessment cards working? If not why?



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Handout 1

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