

Reflective Diary for Cohort 4

Please find your name and a date and note any reflections, findings, suggestions. Please use the questions to guide your thoughts

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Reflective Diary for Cohort 4	1
Dom Kelly	4
Duncan Maidens	6
Frances	7
Jody Carter	8
Jon Chippendall	9
Kasia Kaminska	9
Louise Wade	11
Unnnamed - was this Louise?	11
Marion Reilly	12
Mark Boylan	13
Matt Wimpenny-Smith	14
Michael Jones	16
Michael Laine	17
Paul Jones	17
Start of Day 3	18
Richard Millwood	19
Simon Woodward	20
Steven Jeal	20
Tony Allday	21
Vivienne Anderson	22
Wendy MacLeod	23

Neil Rickus - moved to cohort 3

25

Belinda

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ? We used the smelly code activity with 2 groups of subject leaders mirroring the session led here. Broke down 2 beebot sessions with reception and nursery with pupils designing routes using fake bots before even getting the physical devices out of the box. Added an element of abstraction into one of our 3BM scheme of work activities.
2. What worked well? Designing beebot routes with the reception classes was amazing - the level of creativity and independence displayed just giving the pupils a pen and a whiteboard opened up discussion. One group designed their own beebot route mats using a simple folded sheet of paper - unfortunately all girls - but then bringing that mat back to the whole group empowered that group to explain their design and intentions. Saw that the rest of group when sharing the home made mat were more engaged. Discussion of smelly code with SL and breaking something down into fine detail was really valid and supportive.
3. What did not work so well?
4. What are you going to do next? Implement more change into the 3BM scheme of work to implement design elements and abstraction.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Dom Kelly

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

1 I tried to apply the 'levels of abstraction' approach with yr 5. They had just started a unit in Scratch to draw interesting shapes out of simple ones (using sequencing and repetition and to understand link between angles and number of turns). Instead of the previously-planned step-by-step approach, I tried the following:

- Asked the kids to work out what the code does
- Got the kids to copy the code and run it
- Got the kids to fix 'smelly code' (to assist with understanding of repetition and sequencing as well as allow them to get some confidence in creating a shape using repetition)

In the following lesson with the year 5s, I started with smelly code as a recap of learning from the previous lesson. I then got them to match the algorithm with the Scratch shape so that I could introduce the concept of repetition within repetition (I think that functions are probably best to introduce later in year 5 or in yr 6).

2 I think that the pupils were more engaged by this approach, especially those who I would normally consider lower ability. Why? I think because it was a series of quick challenges that they could try out quickly, but also that fitted together to develop their skills. There was also a good mix of 'on the carpet' group discussion and 'in front of the PC' own work time.

3 I didn't consider differentiation enough, especially in the first lesson. Some of the kids finished the challenges very quickly, but I didn't want them to race ahead of the rest of the class so that the rest of the unit would not be relevant for them (is this wrong?).

For the second lesson, I introduced extension challenges (eg draw a pentagon instead of a square), which allowed for depth rather than using additional computing concepts.

I shared my lesson plans with the two other year 5 teachers delivering computing lessons. Unfortunately, due to a lack of time and potentially confidence, they didn't use them. It would have been interesting to get their feedback on how it went.

4 I would like to pass on my learning from this course onto the relevant teachers at my school. I would also like to revisit my unit plans, giving greater consideration to how progression works, both on a unit and year-by-year level.

Start of day 3

6. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
7. What worked well?
8. What did not work so well?
9. What are you going to do next?
10. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Duncan Maidens

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. What would you like to see in guidance on using design?

Frances

1. Breaking things down in much smaller steps with pupils. Slowing down pace of 'using scratch.'
2. Focus on looking at smelly code with pupils and discuss and refine
3. Look at Beebot lessons - break them down more and focus more on unplugged activities

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. What would you like to see in guidance on using design?

Jody Carter

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

Looked at different pedagogies - not just copy or guided exploration. Updated some planning to try and get rid of using forever loops. Started to plan curriculum for next year - breaking down into imitate, innovate and invent along with possible genres (linking to Talk for Writing in English), micro-steps (linking to Maths for Mastery) toolkits and must haves per year group.

2. What worked well?

Linking to how we already teach English and Maths - teachers able to relate better to this and the idea of micro-steps, although this hasn't been implemented as yet, only discussed.

3. What did not work so well?

It's early days at the moment, teachers are teaching computing and coding but going to begin to integrate ideas from these sessions into the new academic year.

4. What are you going to do next?

Update curriculum, CPD for staff to show what they need to teach, Scratch CPD.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Jon Chippendall

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. Have looked at the units currently taught across the school to reflect on the spread of activities/teaching approaches used. Where required I've suggested activities for teachers to include in the units for a broader spread. I haven't planned everything for these units but rather informed teachers of idea structures and leaving to them to design activities.
3. What worked well?
4. In feeding back on the course during a staff meeting, many of the teachers in my school were able to make links with the teaching approaches used across other subjects. This seemed to boost confidence in teaching of CS by drawing on expertise in teaching approaches from other subjects.
5. What did not work so well?
6. Still large variation in confidence - taking some teachers to more advanced expectations/discussions left some behind!
7. What are you going to do next?
8. Looking forward to discussions today on other areas of cs curriculum. Particularly around progression and continue to refine curriculum I. Light of third.

Start of Day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

I haven't taught any coding since the last session, other than with Code Club but I am about to teach a block with Year 6. As a result, I have planned a unit taking into account a lot of what we have talked about on the course.

I have not introduced procedures in school before but this is all based on

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Kasia Kaminska

Start of day 2 (Hi Kasia - I can't seem to find your reflective diary for the start of day 2 - did you complete it? JW) Is it this

The unit have planned introduces procedures, which I hadn't taught before after last time's session. It uses the idea of smelly code and also has lots of short assessment tasks like

matching the algorithm to the code and identifying bugs in code. I have also planned it to be fairly short – after our discussions last time.

Post this last session, I intend to rewrite our computing scheme of work. I had originally planned to start this tomorrow but unfortunately I am doing cover all day tomorrow.

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
- 5.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?
- 6.

Louise Wade

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
Focus: Reading, predicting and talking about code
When teaching year 4 coding using Scratch I started with a pre made file and focussed on reading the code. I first modelled how to read the code and then asked the children to read it aloud with me. In pairs I asked the children to write on their wipe boards what they predicted would happen when the code was run. The children held up their boards for me to read. I chose a few children to come to the front and explain their prediction. I asked the rest of the class to say if they agreed. After running the code the class tried to match the different parts of the code with the output.
Next I gave the pupils a file with the same coding blocks and set them a similar, (but not exact), task.
2. What worked well?
The pupils benefited from reading the code a number of times. However some children just wanted to get on the computers and start creating.
3. What did not work so well?
Children who have difficulty with reading struggled. I needed to break this down further.
4. What are you going to do next?
I will simplify this task by breaking the code into different parts.
Look to review reading code tasks in my planning.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
Focus: Developing children's use of RAG when designing.
I modelled how to RAG a design and I asked y6 to RAG their game design.
2. What worked well?
It gave the pupils something to refer to when talking through their game with their programming partner and writing their code.
3. What did not work so well?
Some children needed to create a more detailed design. They needed more time to review and edit their design.
4. What are you going to do next?
I need to model with greater detail how to RAG a game design. I also need to model how to review and evaluate a design. I want the children to interview each other about their design.

Review how I teach design in my planning

WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

A design framework would be useful.

Unnnamed -

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

Revisited the curriculum with staff. Attempted some non computer algorithm work with teaching assistants and staff in staff meeting. Then did a variety of 'smelly code' tasks. Worked with KS1 pupils with Scratch Jnr.

2. What worked well?

Pupils in KS1 really enjoyed trying to create shape in Scratch Jnr . They found talking through and modelling of being pen being precise so useful to their work.

I also used a multichoice quiz to help pupils with terminology on Ipads - pupils found this really useful - competing against time and see each other etc.

3. What did not work so well?

A number of staff struggled with the debugging activities and unpicking x or y to which part of the curriculum which showed to myself far more input is needed for a number of staff.

I need to look at my delivery with staff and go back a number of steps to unpick tasks and terminology.

4. What are you going to do next?

Due to high turnover of staff I think I misjudged knowledge due to previous training a year before. Therefore I have created an audit of strengths and development - going back to basic. I've used the CAS audit as a template and built upon that.

I want to look at the whole curriculum and help staff design activities linked with this. Thus applying it in a cross curricular way.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Marion Reilly

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Mark Boylan

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
 2. What worked well?
 3. What did not work so well?
 4. What are you going to do next?
-
- 1) Shared what I had learnt with our computing teacher. We discussed the use of blocks and repetition and agreed to introduce this earlier than year 6. Initially she was very reluctant to try this with children below year 6 I persuaded her to give it a go and she tried it with Year 4. They tried to create a short routine to draw a shape on the screen - initially by looking at code on the screen (copy and see what it does) and then adapting it to try their own. She reported to me that it seemed to go well with children and that they enjoyed the challenge. We will look at how well they remember it next term when we extend into a new project. We did discover that the blocks prevented us from seeing it globally which is a concern. We also discussed the use of "smelly code" and are going to try it with children, especially those who are more able with coding, when we discuss the debugging or looking at their own code to discuss if it can be improved..
 - 2) With such a short space of time and having an assessment week we haven't been able to cover much since the last session.
 - 3) I have really begun to question the computational thinking model and shared with our Head of School, who was questioning us about Growth Mindset, that we need to possibly draw on elements of computational thinking, alongside problem solving alongside growth mindset to create what a pupil at our school looks like with elements of collaboration, persuasion, tinkering(exploring) creative etc.
 - 4) What next - In terms of design I have started looking at how we can plan design into next terms theme of Fairgrounds, which is cross curricular, DT/Science/Computing. I am starting to look at how my scheme of work can be adapted to ensure progression in computing by really questioning if it is correct. I am also thinking about what I need to pass on to teachers to encourage them to use computing more widely in the classroom and not leave it all to the computing teacher who only covers it during PPA sessions.
 - 5) I am trying to be clear in my head what is needed so that I can share with others and how I might create a blog or some other way of sharing so people understand clearly.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

2. After our last session the first thing I did was talk with our computing teacher and we discussed how we could incorporate design into future teaching/planning. We agreed that we would look at this in the summer term. .
3. What worked well?
4. We have also looked at how we will introduce initialisation blocks into our practice to help set the standards we want from good code practice
5. What did not work so well?
6. We also talked about using the term "smelly code" - and how we would get children to question code, particularly when debugging. This was something that I think I would use, not sure how comfortable our computing teacher is with this term - something to develop
7. What are you going to do next?
8. Looking over the materials it helped me to understand the importance of the big three : sequence, repetition and selection. I want to take the whole overview for the curriculum and explore the long term plan, this time looking at progression and build this into the new planning. With the scheme of work being used as a baseline in two/three schools I want to ensure that it is right so that other teachers understand why and how to use the progression in their teaching.
9. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?
10. It is helpful to see how design has been used through a project, and in different ways - linking to scaffolding. I think it is an important factor, but for most people (and me in the past) design has been about the look/ UI and not the whole project even though at times flow charts and mind maps have been used. Making the link explicit between design and constructing/deconstructing the code.

Matt Wimpenny-Smith

Matt Wimpenny-Smith

Start of day 2

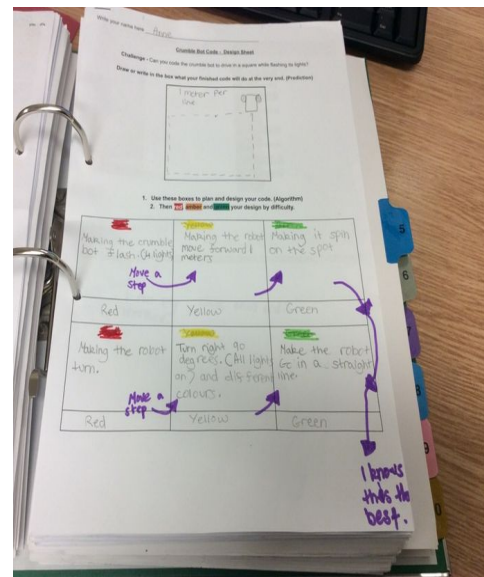
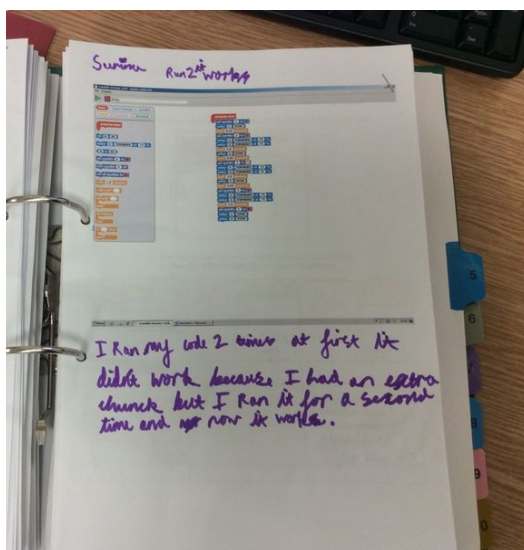
1. **What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?**
 - The first thing that I did was an audit of my coding coverage across all the years from 1 to 6 over a couple of academic years. This audit helped me to highlight gaps in the knowledge of pupils. This audit also helped me to show where I might have created gaps in my teaching.
 - I created a progression document of the big 3 from shallow to deep on usage and then got all my year 5 pupils to RAG their progression on this document. This has shown to me the range of understanding in the class and how certain children.
 - I have also been thinking hard about my project design so I decided to try spending more time working on the design stage of a programming before the pupils went into coding. I tried this with Yr 4 pupils by creating a design sheet to plan a program for the

crumble bot. The sheet had a space for a prediction and then six boxes for an algorithm. The challenge was to create a program to control the crumble bot.

- In the next lesson the pupils took this design and created the code for it they then had to run it on the crumble bot. I only had one bot set-up and a test area in the classroom.
- In the final lesson I asked the pupils to review their designs once again but this time using a 'purple polishing pen' to show how they would change their algorithm or prediction now that they had create code and run it. This is an abstraction process.
- At the very end of the project I got them to screenshot their code and then purple edit to say which bits of code worked and which bits did they change / would change.

2. What worked well?

- Spending more time in the design phase of a project is helping them to achieve better outcomes when they create their code.
- I am starting to notice gaps more in the pupils knowledge and understanding. This is good and shows I need to do more scaffolded tasks to improve their understanding.
- Use of the RAG and 'Purple Polishing Pen'



- This photo shows pupils print their code and annotating it with the purple pen.
- Producing a progression document for the big 3 and giving that to pupils so that they can get a feel for where they are at within this.

3. What did not work so well?

- One of the challenges is finding the best way to capture and document what the pupils have been doing. So I have been thinking about folders for pupils. I am currently trailing for Yr 5 and 6 Seesaw app for my own evidence and then children upload their work onto Google classroom via photos and files.
- Then in Yr 3 and 4 I am thinking about Seesaw for my evidence and the pupils having folders for their design work.
- Then in Yr 1 and 2 I use Seesaw to capture everything that they do.

4. What are you going to do next?

- Thinking about how I am going to capture these designs and all this great work and I am thinking about either using seesaw or maybe have pupil folders.
- I want to develop further progression maps for variables and procedures (make blocks) and also a RSSVP (Repetition, Sequence, Selection, Variable and Procedure map similar to the SPAG tube map.
- Consider the new version of scratch which is coming in August 2018.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

I have been using more chunked activities trying to use a range of different scaffolding approaches. I have been re writing my medium term plans to include this. I don't use off the shelf plans as I like to create all my own from 'scratch' that way I can totally bespoke what I'm teaching to the pupils. I do take ideas from the commercial SoW and adapt them. I have done an audit of coding coverage looking at the different tasks and I am now going to try and increase the range of different activities.

2. What worked well?

Starting to really un-pick my pedagogy and slow down and spend time looking at use of different blocks to really build up pupils understanding.

3. What did not work so well?

Not sure currently as this is developing over time.

4. What are you going to do next?

- I am want to develop clearer paths in computing across the phases
- **I want to deliver the things I have learnt on this course to the wide comunity via the local CAS hub.**
- **I am going to introduce a sketchbook journal for year 4 to 6 so children and really spend time doing designs and other planning.**
- I am trying to come up with a document that tie in the progression with learning objectives and SKU but it's proving to be tricky. I am also planning to look at my planning and start creating more chunking using specific tasks to help pupils to understand the concepts.

5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

- For children to understand the importance of design as a stage for their computing work.

- That children can experiment with different designs to help them solve problems.

Michael Jones

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Michael Laine

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?

The misunderstandings and misconceptions that can be passed onto pupils at the primary stage of learning 'computing'; which will then have to be unlearned in their secondary phase of education. This will mean upskilling the staff in relation to 'Before-Now-Next' in the learning process of 'computing' and 'coding'.

4. What are you going to do next?

Find out from staff what they believe 'computing' is? (Which so many would what relate computing to mathematics wrt algebra and arithmetic operations).

There needs to be a shift in Thinking, as 'computing' relates to Literacy in equal measure if not more. Problem Solving needs to be the essence of 'computing' and coding. Solve the problem in anyway possible, include Unplugged, and then make it more Simple, elegant and efficient by Comparing their Solution to others and discuss and collaborate. It is about the process of making the Solution easier for the user to execute.

Start of Day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Paul Jones

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

Start of Day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

Richard Millwood

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

Design, see:

<http://blog.richardmillwood.net/2018/03/15/keynote-voting-wearables-at-cesi-conference/>

Different regional groups of teachers were invited to prototype solutions to the challenge of making an audience voting on Microbits and display on a Microbit wearable of the speaker using the A and B buttons to vote and the radio functions to transmit to the speaker Microbit. This task sat well with dividing labour and working in small groups to take on one or other half of the problem.

Guided exploration, in a short lesson with a mixed Year 4 and 5 group, I took their exploration of different polygons, which they simply sequenced, and introduced making a block for polygon with number of sides as an input.

Reading coding - I did a soapbox at the CESI Teachmeet about reading code before writing, but had little response, although some went away thinking!

2. What worked well?

Design: Collaborative work where the task naturally subdivided into tasks which needed design discussion between collaborators.

Guided exploration: characterising the building of blocks as a powerful spell in the magician's armoury!

3. What did not work so well?

Reading coding: not enough time nor sophistication - deserved a hands-on workshop rather than short rant!

4. What are you going to do next?

Try to make resources to support others using the Microbit's natural use for collaborative working when using it and its radio functions.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

Guided exploration: Encouraged by our discussions about blocks, I tried introducing blocks to a primary (aged 10-11) group in Ireland and found they took to it very well in a very short time.

2. What worked well?

I found they took to it very well indeed.

3. What did not work so well?

4. What are you going to do next?

Reading: I am interested in the idea of looking for or preparing some really good examples of 'comprehension' tasks - reading code with a purpose to decompose it.

5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

More examples, animated with their development - perhaps through video and talk aloud?

Simon Woodward

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Steven Jeal

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?

I have planned a staff meeting for this week (Wednesday 21st) to feedback to teachers some of the ideas and thoughts from the last session. Like many primary school some of our teachers content knowledge is weak so I will be trying to support them with this. I am going to begin the training with demonstrating SCRATCH through the scaffolding techniques that we were given, as many of these are not featured in the units of work that we are currently using.

With year 4 I used 'smelly code' The children ideas amazed me and they were able to decompose the code and debug it. The children were able to remove repeated blocks and replace them. For example 'turn 90 degrees doubled was replaced with turn 180 degrees. Also I was impressed that children were able to replace repeated code with 'repeat 4 times' hence

children were removing unnecessary blocks. We also discussed initialisation and children added starting points and starting costumes.

Next, I would like to analysis the current units of work that we are using (ELIC schemes) and look at progression across the school. I am keen to focus my attention on the big three. Selection, sequencing and repetition. This will then support staff with assessment.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Tony Allday

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

Revisited curriculum and updated areas of coverage. Tried paper-based design. Also introduced Computing project books to record evidence (start in Year 3 and books move up).

2. What worked well?

Doing design-work on paper did work. I think I have developed a good set of programming topics which incorporate progression. Focus programming in term 1. I am happier now that I am covering computing curriculum in a more balanced way.

3. What did not work so well?

Lots of little things that you try and remember for next time.

4. What are you going to do next?

Try and turn my work into a set of units that can be handed over to other teachers.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. What would you like to see in guidance on using design?

Vivienne Anderson

Start of day 2

1. What did you try in school/training teachers etc as a result of our last workshop?

I talked the the teachers about algorithms and design and how they are used in programming. We used every day sequences and looked at how they map over to coding. I also showed the computing team how we encourage tracing as the children develop their programs.

2. What worked well?

Although they could talk to me about it they said they would find it hard to implement in their computing lesson. I have suggested making a simple booklet that they could follow.

3. What did not work so well?

4. What are you going to do next?

I am keen to complete a booklet that explains design and algorithms. I also need to take video footage of the children's responses to analyse how they handle coding before and after reading the story book.

Start of day 3

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
2. What worked well?
3. What did not work so well?
4. What are you going to do next?
5. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Wendy MacLeod

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) So far... I have introduced targeted tasks into my Scratch lessons where the children have to read code and answer a series of questions about it eg; When the Sprite is clicked, what do you think this code will do? Which type of computational thinking is being used in this piece of code? There is an error in the code, can you find the mistake and suggest a way to correct it? I've made sure that this task is differentiated so my LA usually either have a shorter/less complex piece of code and/or easier questions.
2. What worked well? I think using Google Classroom to send out the tasks has worked really well. I was recently observed by a headteacher for my first official Practitioner of Excellence observation. He really liked the use of Classroom because it meant the other children were not aware of the differentiation. I like the way that the children can't cheat on the targeted tasks as they are sent via Google Docs and also the wealth of information they provide for assessment. A few weeks after Day 1 of the course, we were visited by 50 delegates representing over 30 schools across the Netherlands! They were very interested in the range of approaches for teaching Scratch and observed lessons which involved design, targeted tasks and some guided exploration.
3. What did not work so well? The children referring back to the design which has been very hit and miss despite modelling it for them. Perhaps including this as part of a targeted task would help develop their skills?
4. What are you going to do next? Lead staff training on using a range of approaches when teaching coding. **It has occurred to me since the last course that teachers are currently focused on getting the children's code to work regardless of how long winded it may be. I don't think teachers have thought about making the code high quality and with this in mind there needs to be a shift in current thinking and the way the subject is approached. More and more I am seeing the links between Computing and ENGLISH in terms of designing (planning a piece of writing) and improving code (uplevelling a piece and making it higher quality) We need examples of high level quality code to inform teachers and to build confidence. We need a set of targeted tasks with smelly code which children can uplevel and we need to map out types of programs with different aspects of Computing - this would make it SO much easier for teachers and would dramatically improve the quality of the Computing lessons!**

Thank you Jane so much for Day 1 - it was truly inspiring!!! Simply cannot wait for Day 2!

Start of day 3

6. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?
7. What worked well?
8. What did not work so well?

9. What are you going to do next?

10. WHAT WOULD YOU LIKE TO SEE FROM GUIDANCE ON USING DESIGN?

Neil Rickus - moved to cohort 3

Start of day 2

1. What did you try in school, teaching teachers, updating curriculum material as a result of our last workshop (e.g. design, reading code tasks, guided exploration, ragging) ?

Following the last session, I added information to a number of taught session slides to explain the pedagogy employed to teach the programming concept. Towards the end of the session, we discussed how the pedagogy had altered their enjoyment of the topic and it was particularly evident how “copy code” had not been a positive experience for students.

2. What worked well?

Tinkering was used at the start of the session when introducing students to Scratch. I had previously purposely left this out, as they needed more guidance, but including it meant students became aware of the dangers of using this approach with children.

When students were undertaking physical computing activities, they were encouraged to pick out and remove / alter “smelly code”

3. What did not work so well?

I had intended to look at different “Move” blocks with some students on the BA course, but I decided the limited time I had with them would be better spent making their programs more engaging to the user.

4. What are you going to do next?

Add additional guidance to my “Programming with Scratch” booklet, such as suggesting pedagogical approaches that could be used when introducing each program, which could include producing a design. I also intend to include the addition of pupils’ own blocks as extension activities, plus updating the screenshots to reflect the Scratch 3 interface.

I use “forever” loops within a number of programs, although I’m going to examine whether these are always necessary and if there is an alternative way of implementing the functionality.

I’m going to alter some of my physical computing resources to remove “copy code” activities and replace them with different pedagogical approaches.

When using paired programming with children, I’m going to ensure they create an initial design, which will mean the “navigator” has a specific role during the programming task.

Start of day 3