

**BCS, The Chartered Institute for IT, Academy of Computing Board  
School Curriculum and Assessment Committee**

Notes of the meeting held on Monday 15 March 2021 at 11:00  
Online meeting

**Present**

Prof Dame	Muffy	Calder	MC	Chair, University of Glasgow
Mrs	Julia	Adamson	JA	BCS Director of Education
Mr	Miles	Berry	MB	University of Roehampton
Dr	Jon	Chippindall	JC	Crumpsall Lane Primary School
Ms	Beverly	Clarke	BC	BCS National Outreach Manager
Prof	Tom	Crick	TC	Swansea University
Mr	James	Donkin	JD	Ocado Technology
Mr	Pete	Dring	PD	Fulford School
Ms	Catherine	Elliott	CE	Sheffield City Council
Mr	Dave	Gibbs	DG	STEM Learning
Dr	Helen	Harth	HH	Royal Society
Mr	Peter	Kemp	PK	King's College London
Mr	Robert	Leeman	RL	Arm
Mr	Peter	Marshman	PM	BCS/Leighton Park School
Dr	Bill	Mitchell	BM	BCS Director of Policy
Mr	Niel	McLean	NMcL	BCS Head of Education
Ms	Sarah	Old	SO	Ofqual
Prof	Simon	Peyton Jones	SPJ	Microsoft Research
Ms	Carrie Anne	Philbin	CAP	Raspberry Pi Foundation
Dr	Saima	Rana	SR	GEMS World Academy, Dubai
Mr	Neil	Rickus	NR	University of Hertfordshire/BCS
Dr	Sue	Sentance	SS	Raspberry Pi Foundation
Ms	Zoë	Spilberg	ZS	BCS Head of Education (Product)
Mrs	Jane	Waite	JWa	CAS London, QMUL
Dr	John	Woollard	JWo	University of Southampton, CAS Assessment Working Group

**In attendance**

Ms	Samina	Kiddier	SK	Department for Education
Mrs	Maxine	Leslie	ML	Meeting Secretary

**Apologies**

Ms	Sharon	Cromie	Wycombe High School Academies Trust
Ms	Clare	Fowler	Department for Education
Sir	Mark	Grundy	Shireland Collegiate Academy Trust
Mr	Atif	Khan	Pearson
Ms	Kerensa	Jennings	BT

Mr	Mark	Martin	Urban Teacher
Ms	Nicola	Mounsey	Calday Grange Grammar School
Ms	Katy	Potts	Islington Council
Mr	James	Spencer	St Martins School
Ms	Liz	Walters	Ofqual
Mr	Marc	White	Ofsted
Mr	Matthew	Wimpenny Smith	Headington School

## 1. Welcome, apologies, declaration of conflicts of interests & Chair's Report

The Chair welcomed all attendees. There were no conflicts of interest reported. The Chair reported that her meeting with SPJ and Graham Archer (DfE) had been postponed, but thanked SPJ for leading on this.

This is the last meeting in the old format and there is a great deal of work to do. At the last meeting Members had agreed that four Working Groups should be set up and this was in progress. Future Committee meetings will focus on Working Group reports, to be delivered by the WG Chairs. One in every four SCAC meetings is likely to be a plenary for everyone.

**Action: Add plenary session every four SCACs to the process**

## 2. Actions from previous meeting held on 12 November 2020 [SCAC/2020/15]

Members APPROVED the notes from the previous meeting. All actions have been covered or subsumed within the work of the new WGs. The only action outstanding relates to the parents' brochure.

## 3. New meeting structure & Terms of Reference [SCAC/2021/02]

Members APPROVED the amendments to the ToR, which related to the addition of working group establishment to include membership from within and outside of the Committee membership. This document will be presented at the next BCS Academy of Computing Board meeting for ratification.

The following Members will be moving to the new WGs: Dr Jon Chippindall, Catherine Elliott, Dave Gibbs, Atif Khan, Pete Marshman, Carrie Anne Philbin, Katy Potts, Neil Rickus, James Spencer and Matthew Wimpenny-Smith.

The following Members will be staying on the smaller scale Committee: Prof Dame Muffy Calder, Miles Berry, Prof Tom Crick, Sharon Cromie (TBC), James Donkin, Pete Dring, Kerensa Jennings, Peter Kemp, Rob Leeman, Mark Martin, Nicola Mounsey, Prof Simon Peyton Jones, Dr Saima Rana, Dr Sue Sentance, Jane Waite, Dr John Woollard and Dr Helen Harth.

## 4. Working Group kick off – see [slides](#)

NM indicated that there was a slide on each of the four Working Groups (WGs), for Members to make comments. Individual Members had been allocated WGs based on their expressions of interest and the purpose/scope and deliverables for each WG would be agreed and signed off at the first meeting of each. Each of the WG Chairs outlined the background and purpose (with the exception of Mark Martin who had sent his apologies).

SS indicated that the Digital Literacy Working Group was large due to a large number of expressions of interest. There was some anxiety in England about the focus on CS taking

away from Digital Literacy, the importance of which had engaged peoples' minds during the pandemic. This is an opportunity to look at this in detail. NCCE have just published a report looking at where Digital Literacy is addressed and what progression looks like (England only). The WG will look at it more at a policy level and from all the home nations' points of view.

RL indicated that for the GCSE specification, there are a lot of moving parts. One of the aims is to improve accessibility and uptake as a result of this work, as there are many ways to keep it interesting and deal with the problems.

HH indicated that the 4 Nations Working Group work will feed into the work of the other WGs. A work plan had been drawn up for discussion with NM in the next few days, with the first meeting scheduled for the end of March.

The timescales for each WG will need to be established, as their work will not continue in perpetuity. NM invited suggestions/steers on sources of evidence, areas of related work, organisations or individuals that should be contacted for views and any other observations to help the WGs in their work.

The main discussion points (by WG and overall) were:

#### *GCSE WG*

- For the GCSE WG, this isn't a major revision exercise (eg, to make the subject compulsory) but a targeted exercise as invited by the DfE to 'tweak' only, focussing on improvements. Also, with an eye to future 'shifting the centre of gravity' and avoiding creeping incrementalism. RL pointed out that the GCSE is intended to be general and therefore should not be too specialised and not about 100% pass rates.

#### *Digital Literacy WG*

- SS indicated that she has been undertaking work on culturally relevant pedagogy at RPF as a result of funding secured from SIGCSE special awards. This work focuses on providing resources and activities to help people to feel included and those involved include experts from the US and Canada, with the output in the form of guidelines.
- Is there scope to look at personal capabilities within Digital Literacy, eg methods of learning new technologies? Often confident pupils able to learn themselves, is meta cognitive domain included in the scope (JC)?
- Does the scope of Digital Literacy include the existing qualifications landscape and whether it is fit for purpose and valued (SPJ)? Probably not in current scope but could look at in future.
- ZS flagged that funding for Essential Digital Skills Level 2 is still out for decision (funding lost at L1), but offered to add context for this, which may be helpful for the WG.
- For qualifications in DL, it may be useful to look at the wording in consultations on ICT user qualifications. The mood music is that L2 skills are as not relevant as those at L1, so if someone has a L1 qualification, the view could be that DL is covered and this may affect policy decisions in DfE. It is therefore important to keep an eye on this (BM). See the digital skills consultation <https://www.bcs.org/media/6668/post-16-qualifications-response.pdf>

#### *Four Nations WG*

- For Four Nations WG, not sure about meaning of 'pipeline' (JWa). HH agreed and undertook to amend the wording to clarify this.

*Overall comments*

- It will be useful for WG Chairs to share regular snapshots of their work with the whole Committee. This will help keep the Committee engaged and help trigger support from those not directly involved.
- One suggestion was for Chairs to document a summary of work and convene a meeting with 5-6 people around the country who are experts in the relevant area, to ask their opinion. Perhaps this could include Committee Members, or those stepping down at this point. Such conversations can be really helpful in raising issues that the WG has not previously discussed.

**Action: anyone interested in participating in such 'expert evidence sessions' to contact NM/ML**

- There may be follow-on work identified for which the Committee could consider setting up future WGs, or allocate this work to the existing WGs

**Action: identify any possible future work for consideration by SCAC**

- There is a big piece of work in GCSE/A' Level (not VQ/tech quals) across the 4 nations which will help to scope out next set of work for future WG attention.
- It would be useful to have a registry document containing the scope of the WGs and also the gaps, enabling overview with governance (JWa). An example could be competency based pieces of work which may sit above the WGs, it is important to avoid a scatter gun effect.
- As a follow up to the GCSE Working Group, we could look at potential longer term competency based - and longer term view of CS (JWa).

**Action: BCS staff to draw up a registry identifying work of each WG for adding other work so it is easy to identify overlaps and potential gaps****5. DfE Pupil, Parent, Carer Survey (SK/NM)**

[www.gov.uk/government/publications/pupils-and-their-parents-or-carers-omnibus-wave-1-survey](http://www.gov.uk/government/publications/pupils-and-their-parents-or-carers-omnibus-wave-1-survey) and see [slides](#).

SK introduced the item, indicating that she was unable to share the ethnicity research data at this stage.

Questions and observations included:

- Parental recommendations are not feeding into what is happening in schools.
- The 23% interest is above the 13.2% who actually did take it in 2019, which suggests there is something else going on. It is interesting that in the March 2019 report: "Most parents/carers of pupils (79%) would advise their child to take a GCSE in computing", asking if the change in naming had an impact here, had the terminology been explored (PK)? SK replied that it could be possible to do some testing with teachers and work was being done with the science aspects of this.
- MB asked if DfE have ideas of why the subject is unpopular in secondary schools and SK replied that workshops had been held on this in autumn 2020, when the feedback was that there is a lack of real world relevance and an understanding of the careers that Computer Science can lead to. Thoughts about tweaks to the subject content were dismissed as with Covid there is a clear mandate to leave pupils and teachers alone. Also, there are system barriers for females such as timetabling or more fundamental reasons why they are not engaging. RPF is looking at this area in more detail.
- For subject content, DfE can't say yet what the barriers are, but anecdotally T Levels appear to be more popular with males.

- Is there any scope for funding or further research into careers links in CS and where it's done well (PD)? SK indicated that DCMS is looking at commissioning research on careers. Also, CyberFirst and CyberDiscovery and can provide more detail on this at the next meeting.

**Action: SK to report back to SCAC July meeting on careers research being commissioned by DCMS**

- For the ethnicity issues, there is a more detailed breakdown in the background and if this is not unpicked, there is a danger that important factors will be missed. There is a group looking at this and it would be good if the outcomes could be fed in (DG). ["This is engineering" (RAEng) reports an impact on engineering aspirations, especially under-represented groups <https://www.raeng.org.uk/education/this-is-engineering>]
- Interested to see if the dial has moved post-Covid and looking back 20 years in Scotland, a survey on careers in computing science revealed a total disconnect between careers and qualifications (MC).
- As this survey dates back to 2019, are there plans for the next survey (JA)? SK replied that there is 2020 survey which is smaller scale with two questions: CS and the interest in the subject during Covid and schools teaching digital skills. This is yet to be published. A larger survey is planned for later this year to inform policy development.
- Are there any plans to extend the demographic data eg, rural/urban, north/south, socio-economic class (JD)? SK replied that this would be helpful but mindful of burdens on parents/form filling.
- The reasons for choosing a particular subject ranges from its value, whether it's enjoyable, whether it's achievable or whether there are barriers such as gender differences. Value is important but not sufficient in its own right and may be more important for parents than for pupils, so it is important not to concentrate on fixing one thing only (NM).
- SK had undertaken some desk research looking at the gender balance project that RPF is doing. Subject choice booklets had themes and language that were often off-putting to girls. Examples included pictures of boys, the listing of ICT technician and systems admin jobs and an expectation around maths.
- Is there data on conversion/attrition after each stage (JWa)? SK replied that there should be something, certainly for GCSE to A' level. The level of female applications for UG degrees increased last year, but this is not regularly looked at, so could take this away to look at. Representation of females at A' level has improved rapidly and at scale, however numbers are still small and it is important to look at attrition.
- What about benchmarking of CS uptake (eg, compared with maths)(JD)? It is uncertain that this is possible due to the limitations of numbers and teachers available to teach the subject.
- Would a different profile across gender and ethnicity help (MC)? SK indicated that there was an aspiration to have an uptake of CS on the same level as that for other sciences ie, 26/27% for physics/chemistry although a 20% increase in CS would be needed for this. Another area of the curriculum would also have to be de-prioritised.
- The way that the curriculum is organised with compulsory maths and English in the EBacc works to steer people to history and geography, with CS tending to be included in an option group with PE and art as an optional subject. KS3 has a direct impact on KS4 experiences and the perception of enjoyment. The NCCE Teach Computing Curriculum will hopefully have a big effect on this. The SCAC Working Groups, particularly *A Culturally Responsive Curriculum*.

**Action: WG Chairs to ensure that making choices is including in the purposes of each WG, especially *A Culturally Responsive Curriculum***

## 8. Agreed actions and AOB

It was agreed that there is a need to map out a plan for when the work of the WGs is concluded. It is also important to maintain the consistency of the work undertaken, how and when each piece of work is concluded.

**Action: BCS staff to liaise with SCAC Chair on a long term plan for SCAC and its Working Groups**

The Chair thanked Members and closed the meeting at 12:28.

## 9. Dates of 2021 full Committee meetings

Wednesday 7 July 2021 (11:00 – 13:00)(online)

Tuesday 9 November 2021 (14:00-16:00)(F2F/online TBC)

### Actions - responsible people in red

#### March2021.1 Meeting planning

Add plenary session every four SCACs to the process **ML**

#### March2021.2 WG kick off

Anyone interested in participating in such 'expert evidence sessions' to contact NM/ML **Members**

#### March2021.3 WG kick off

Identify any possible future work for consideration by SCAC **Committee**

#### March2021.4 WG kick off

Draw up a registry identifying work of each WG for adding other work so it is easy to identify overlaps and potential gaps **BCS staff**

#### March 2021.5 DfE Pupil, Parent, Carer Survey

Report back to SCAC July meeting on careers research being commissioned by DCMS **SK**

#### March 2021.6 DfE Pupil, Parent, Carer Survey

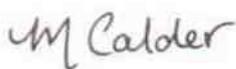
Ensure that making choices is including in the purposes of each WG, especially *A Culturally Responsive Curriculum* **WG Chairs**

#### March 2021.7 AOB

Liaise with SCAC Chair on a long term plan for SCAC and its Working Groups **BCS staff**

#### November2019.5 Parents brochure

Test the updated draft brochure with key people. **MC**



Signed: \_\_\_\_\_

**Prof Dame Muffy Calder**

**Chair of School Curriculum and Assessment Committee**