# BCS, The Chartered Institute for IT
## BCS School Curriculum and Assessment Committee

Notes of the meeting held on Monday 14 March at 11:00 am
Online meeting

### Present

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| Prof Dame | Muffy | Calder | MC | Chair, University of Glasgow |
| | Julia | Adamson | JA | BCS Director of Education |
| | Miles | Berry | MB | University of Roehampton |
| | Beverly | Clarke | BC | BCS National Outreach Manager |
| Prof | Tom | Crick | TC | Swansea University |
| | Pete | Dring | PD | Fulford School |
| | Rachael | Gray | RG | Department for Education |
| Dr | Helen | Harth | HH | Health Education England |
| Dr | Peter | Kemp | PK | King's College London |
| | Robert | Leeman | RL | Arm |
| | Mark | Martin | MM | Urban Teacher |
| | Niel | McLean | NMcL | BCS Head of Education |
| | Nicola | Mounsey | NMo | Calday Grange Grammar School |
| | Sarah | Old | SO | Ofqual |
| Prof | Simon | Peyton Jones | SPJ | Epic Games |
| | Sue | Sentance | SS | Raspberry Pi Foundation |
| | Jane | Waite | JWa | Raspberry Pi Foundation/QMUL |
| Dr | John | Woollard | JWo | University of Southampton |

### In attendance

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| | Alastair | Irons | AI | BCS Vice President (Academy), ACB Chair |
| | Ruth | Lehane | RLeh | Meeting Secretary |
| | Maxine | Leslie | ML | Meeting Secretary |

### Apologies

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| | Sharon | Cromie | Wycombe High School Academies Trust |
| | James | Donkin | Ocado Technology |
| | Kerensa | Jennings | BT |
| | Samina | Kiddier | Department for Education |
| Dr | Bill | Michell | BCS, Head of Policy |
| Dr | Saima | Rana | GEMS World Academy, Dubai |
| | Marc | White | Ofsted |

## Notes

| 1 | **Welcome, apologies, declaration of conflicts of interests & Chair's Report [SCAC/2022/02]** |
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| | The Chair welcomed all attendees. There were no conflicts of interest reported. |
| | MC reported that the governance group had reviewed the actions from the last meeting and there were none to note. |
| | The Chair's report was circulated prior to the meeting. MC highlighted that she presented an overview of issues and recommendations to the PM's Council of Science and Technology. There were subsequent follow up meetings with civil servants at the Treasury and the Office for Science and Technology Strategy. |
| | MC and SPJ met with Robin Walker, Minister of State for Schools Standards on 28 February. The meeting was very positive. Robin Walker was engaged and said he would like a further meeting. |
| | The Chair invited SO to provide an update on the progress of the response to the correspondence on grading. SO confirmed that there is a team at Ofqual looking at grade boundaries, but the wheels are moving slowly. It is more complicated than for other subjects as it is an unstable picture in terms of modes of assessment. There is a lot of background work to be done and the absence of exams over the last two years gives another layer of difficulty. There needs to be statistical analysis of results, entry patterns, awarding outcomes and the maintaining of standards as well as paper difficulty. There is also a third party looking at candidate performance. It is complicated and slow, but it is a live project. SO noted that it was the work that SCAC had done which started the project at Ofqual as the research team saw there was a case to be answered. |
| | JA asked when the research team were likely to complete their work. SO was unsure but suggested around 10 months to a year. SO is happy to give regular updates. |
| | **ACTION: SECRETARIAT** |
| | JWo enquired about developments in vocational qualifications, eg Progress 8 but SO confirmed that this sat outside of the general qualifications team, with Liz Walters, but undertook to investigate and report back SCAC on this. |
| | **ACTION: Sarah Old** |
| 2 | **BCS Academy Vice President/Board Chair introduction (Alastair Irons)** |
| | AI updated the committee with the ongoing work by the Academy Board. There is significant work ongoing around accreditation and the adoption of AHEP4. A project pilot for new Computer Science Academics is looking at CPD, mentoring and buddying is gathering momentum. This also addresses when a new CS academic is no longer 'new' and links with the CPHC and their mentoring work. |
| | The ACB is also strengthening their relationship with IFIP (International Federation for Information Processing) who have just celebrated their 60th birthday. BCS is the UK agent for IFIP and at the last assembly, AI was elected to the sit on the IFIP Council. |
| | There is some interesting work happening in the devolved nations committees that report to Academy Board. The Scottish computing group (SCEC) has college and higher education representation and is responding to Scottish government policy. The Northern Ireland group |

(NICEC) is just starting and has had town meetings which AI has attended.  TC is leading on setting up a similar group in Wales.

MC noted that a stronger presence on the webpage would be beneficial as the ACB pages were hard to find.  It was also suggested that newsletters were written and circulated, maybe via ITNOW, to keep other groups updated on work and progress.  MC would be happy to write a short article about what SCAC is doing and in particular, the Four Nations Report.

AI shared the slides discussing whether CS qualifications should become a pre-requisite of being admitted onto degree level courses.  AI first noted that 'How to programme in Python' is in the top 10 on LinkedIn Learning.

There is an idea that those who have CS A-level may be given preferential treatment. SPJ suggested that the first year of degree courses could be slightly different depending on whether students have completed an A-level (or equivalent); their course could be broader, richer and deeper.  MC noted that this is already happening at some universities.

AI noted that if CS was taken as an A-level or equivalent, it would show commitment to the subject and the student's chosen career, but if it was insisted upon, that could deter huge amounts of students from taking the subject at degree level.

SPJ suggested an additional bullet point to slide 4– 'Reasons for making it a Pre-requisite' should be about perception in schools and how not making a pre-requisite gives the message that it's not important.

NMo noted on the chat that many good CS students are lost to physics, maths and further maths as CS A-level is not required to study at degree level.

HH suggested an equality impact assessment.  AI confirmed it may be a good opportunity to look at EDI and gave the example that at the school where he is a governor, of the 20 doing GCSE CS, only two are female.

MC suggested the discussion could be taken further at the next meeting and a discussion could be held offline regarding next steps.  MC noted that this makes the work Sarah Old is doing very relevant.

**ACTION: SECRETARIAT**

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| 3 | **EBacc challenges (Julia Adamson) [SCAC 2022 03]**<br><br>MC thanked JA for the  paper which was circulated prior to the meeting.  JA passed on apologies from Toby Eyre who contacted BCS about the perceived impact the EBacc had on the number of students taking Computer Science GCSE.  This year the number had more than halved to 44 in his school.  It is Toby's perception that the school's requirement to meet the government targets on EBacc targets, which have risen to 95%, has had a negative impact on numbers.  There has been a reduction though in the pressure and the timeline for schools to meet the target due to covid.<br><br>NMo confirmed there had also been a drop in numbers at her school.  There have been 80 or 90 doing GCSE CS in previous years but this year only 66 due to the push towards humanities and a foreign language.  Computer Science is not in the same option bucket as the physical sciences. |

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| | PD agreed there is a perception that the EBacc has had a negative impact and if grades were comparable with other sciences it would help, highlighting why SO's work is so important.  The number of CS students has dropped due the promotion of modern foreign languages and humanities.<br><br>NMcL noted that if a student takes CS instead of a language, they would not meet the requirement of the EBacc.  CS is fighting with many other subjects, business studies, economics, music, D&T.<br><br>HH indicated that some schools offer GCSEs over three years and there may be a few more able students who could take CS in one year but was unsure how that may affect uptake.  JA confirmed that many schools were now moving away from this model, and most are doing GCSEs over 2 years and there were added complications with fitting all subjects into the timetable.  Students look at what they will be good at.  CS has to be seen as a subject that will enjoyed for students to want to take it.<br><br>MB agreed with the need to make CS appealing and suggested it should be put in the modern foreign language bucket alongside French, Italian and Spanish as it is in the US.<br><br>Members discussed how this could be raised with DfE and JA undertook to follow this up [action complete]. |
| 4 | **Notes/Actions from previous meeting held on 9 November 2021 and matters arising**<br><br>Noted above in item 1. |
| 5 | **SCAC Working Groups update [SCAC 2022 04]**<br><br>NMcL introduced the paper and MM explained that the Culturally Responsive WG has been looking at how to make the CS curriculum more relevant for young people.  They have been looking at monitoring air pollution around the school and have been speaking with OCR and AQA about the possibility of celebrating creativity.   MM wants to concentrate on national celebration, what young people are doing and experimental learning.<br><br>SS explained that Raspberry Pi are looking at culturally responsive computer science teaching, developing guidelines and working with teachers to plan lessons.<br><br>There will be a deep dive into the Culturally Responsive Working Group at the next meeting.<br><br>**Digital Literacy** (Niel McLean) **[SCAC 2022 05]**<br><br>NMcL asked for any initial observations or comments on the paper.<br><br>SPJ noted that the Digital Literacy update paper doesn't mention qualifications and SS explained that at the first meeting, it was decided that qualifications would be out of scope as there are too many across the four UK nations. After some discussion it was agreed that the next landscape report (after the Four Nations) could look at qualifications. NMcL asked if we're talking about the same things when we talk about digital literacy and MC noted that she found paragraph 4.1 of the report to be extremely helpful.<br><br>PD noted that the document was clear on what digital literacy is and what it looks like within the curriculum.  There is GCSE Computer Science and vocational alternatives but what about those who don't choose CS?  It's suggested that there are too many qualifications but |

from a school's point of view, there are very few. If there were more qualifications directly promoting digital literacy that would be helpful.

TC agreed that not defining digital literacy would be a problem; there has to be a definition. TC spoke about the RS report and what happened in Wales on Digital Competence, literacy, fluency, competence and skills. The EU framework was used in Wales. It's a narrowly defined set of skills. A short paragraph could cover off what digital literacy means, making it inclusive for everyone.

SPJ proposed a definition of Digital Literacy in the chat. MM quoted the example of Transport for London and green literacy and agreed that it was important to have our own definition, which needs to be proactive and applicable. Young people have digital literacy they don't know how to apply it.

NMcL noted that the definition SPJ suggests excludes people who don't use computer systems which outlines the difficulty of attempting to define digital literacy.

MC noted that there is a distinction between a user and member of society and that should be included in the definition. It's not just about being a user of a system, it should apply to all members of society using tech.

HH suggested looking at the purpose of the paper and what is trying to be achieved and that may help with the definition.

NMcL noted that talking about qualifications would have no impact on KS1 or KS2 and that it's not an England-only approach. It was agreed that the view of digital literacy from all four nations should be captured in the document. NMcL questioned whether the committee was happy with the set of principles and themes laid out in part 4? The aim was to describe a capable person not necessarily in the context of an education setting.

MC pointed out that it should say BOTH 'creator' and 'user' in theme 3 and would like to add the word 'leaders' in point 4.3.

MM pointed out that having a strong definition would enable parents to say, 'my child is digitally literate'.

NMcL took a steer on giving a clearer definition and MC noted that this was always likely to be the trickiest working group and working with Quintin Cutts may be beneficial [action complete].

| 6 | **Agreed actions** and AOB |
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| | JA confirmed that the BCS landscape review (previously referred to as 4 nations report) will be published on 15 March 2022 but will go out embargoed to the group on the afternoon of 14 March. It was suggested that the report be made available in both webpage and PDF format to ensure accessibility [action complete]. |
| | MC reminded members of the next meeting date which is a plenary meeting due to take place at BCS London on 13 July 2022 (changed from 6 July 2022). |
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| | MC also reminded members to reply to the meeting requests for the ease of the secretariat. |
| 7 | **Close and date of next meeting** |
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| | **Dates of future meetings:** |

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| Wednesday 13 July 2022 (plenary meeting) |
| Tuesday 15 November 2022 |

**Actions –**
**responsible people in red**

**March 2022.2** Further discussion around CS A level being a pre-requisite for a degree level qualification – add to agenda for next meeting Secretariat

**March 2022** Update on work on grade boundaries – add to agenda for next meeting Secretariat

**March 2022.5** Deep dive at next meeting looking at the Culturally Responsive Working Group – add to agenda for next meeting Secretariat

**November 2021.2** Consider reviewing A-level Computer Science in the same way as GCSE CS BCS staff

**July2021.2** SCAC Working Group Chair updates

Liaise with Quintin Cutts for MM to learn more about the "for-all" perspective on computing in schools: modelling, problem-solving, and alignment with mathematics NMcL/MM

**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
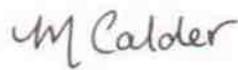
Signed: _____
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**Prof Dame Muffy Calder**
**Chair of School Curriculum and Assessment Committee**