

BCS: Northern Ireland Computing Education Committee

Minutes of meeting of the BCS: Northern Ireland Computing Education Committee held on **11th October 2023** at 3.30pm via Microsoft Teams.

PRESENT

Irene Bell (IB), Michaela Black, Eamonn Brankin, Bill Connor, David Crozier (DC), Andrew Douglas (AD), Michael Douthart (for Graeme Wilkinson), Justin Edwards, Ruth Foster, Michael Gould, Philip Hanna (PH), Ian McChesney (Chair, IM), Anthony McCourt, Michael McEnery (MM), Grainne McGowan, Daniel O'Reilly, Roisin Rice, Rachel Steenson (RS), Gerry Trainor, Colin Turner, Jonathan Wallace

1. APOLOGIES

Alastair Irons, Gareth O'Hare, Ian Somerville.

The Chair welcomed David Crozier, Chief Executive, Software Alliance Northern Ireland (SANI), as a new member to the committee. Also welcomed as guests to today's meeting were Michael Callaghan (Ulster University), Iris Lanny (Oracle) and Niel McLean (BCS Head of Education).

2. MINUTES OF PREVIOUS MEETING (29th March 2023)

The minutes of the previous meeting (previously circulated) were approved.

3. MATTERS ARISING

3.1 Review alignment of ToR with other activity in NI computing education sector.

The Chair has discussed the Terms of Reference with PH and MM. From this it was suggested that, for this meeting, SANI, CCEA, BCS Schools Curriculum and Assessment Committee (SCAS) and BCS NICEC would outline and compare key themes and programmers of work for the upcoming academic year. See minute 7 below.

6.0 WG2 Survey follow-up related actions. See minute 8 below.

4. COMMUNICATIONS FROM THE CHAIR

4.1 The Chair advised committee of upcoming changes to the structure of the BCS SCAC to facilitate a four-nations reporting structure and UK-wide oversight, formally reporting to the BCS Academy Board. See further details in minute 7.3 below.

4.2 Following discussion with the convenor of WG1, it is recommended that the work of WG1 be paused, noting the resources assembled to date on Basecamp.

5. GENERATIVE AI IN COMPUTING EDUCATION

5.1 Use Cases

The first National Conference on Generative Artificial Intelligence in Education was held at the Ulster University's Derry~Londonderry campus in September 2023. The conference chair, Michael Callaghan, gave a detailed presentation to the committee on recent advances in Generative AI technology and its impact on education. The presentation outlined a number of use case scenarios in which educators and learners will encounter these new technologies and the attendant technical and ethical challenges.

A copy of the presentation is available on [Basecamp](#).

5.2 Regulatory Issues

MM gave an update on the work of CCEA and other awarding bodies regarding the impact of generative AI on assessment. The Joint Council for Qualifications (JCQ) have produced a guide for teachers and assessors - *AI Use in Assessments: Protecting the Integrity of Qualifications*. The guide outlines current best practice and mitigations for misuse. A copy is available at <https://www.jcq.org.uk/exams-office/malpractice/artificial-intelligence/>

6. ORACLE ACADEMY

Iris Lanny gave a presentation on Oracle Academy, Oracle's public philanthropy offering to education and its free to use resources for the primary, secondary and higher education sectors. The initiative provides lessons for teachers as well as free access to the necessary Oracle software for lesson completion.

Examples included programming in Java using Alice, developing 2D Games, and Robotics using Java.

Full details on Oracle Academy are available at <https://academy.oracle.com/>.

The role of Oracle Women's Leadership (OWL) in encouraging girls into computing was also highlighted.

7. KEY THEMES FOR 2023/24

7.1 CCEA

MM outlined CCEA's current priorities in computing and ICT education. Most significant at this time is work to enhance the broad digital skills curriculum in

schools, and the provision of non-statutory guidance on how digital skills can be incorporated into other Areas of Learning.

7.2 Software Alliance

DC outlined the Software Alliance's ambitions for supporting computing in school. Foremost in this regard is the TechTeach initiative – a teacher mentoring programme whereby industrialists are linked with school teachers. Through these links, along with seminars and workshops, the aim is to help teachers keep abreast of current trends and technologies in the local software industry, to enhance their confidence in subject delivery and where appropriate to help with resources for the classroom. Uptake so far has been approximately 50 teachers, with a good geographic spread across NI. Support has been provided to teachers on topics such as ChatGPT, Cloud technology and Cyber Security.

The Software Alliance is also working with the Department of Education and CCEA on best to progress their contribution to computing education in NI.

The coordinated approach to industry engagement with schools was welcomed by the committee. In relation to the development of class room resources, it was AGREED there was an opportunity for coordination with the Computing at School and Digital Schoolhouse initiatives. (Action: IB, DC).

7.3 BCS School Curriculum and Assessment Committee

The functional area within BCS in which SCAS and its related activities operate has now been renamed as Education and Public Benefit. Niel McLean outlined the strategic objectives of this area of work, namely to:

- i. Establish BCS as the home of public understanding of computing.
- ii. Support educational institutions to provide high quality digital and computing education.
- iii. Increase the number and diversity of committed high quality computing educators.
- iv. Support young people's computing education.
- v. Ensure policy landscape supports the ambition of BCS as the Learned Society for computing.

In this context SCAS will be relaunched as the Schools and Colleges Committee, with sub-committees for each of the four UK nations.

Discussion noted how this reorganization would improve the opportunity for sharing best practice and policy across the regions.

A copy of the presentation is available on [Basecamp](#).

7.4 BCS NICEC

IM reminded committee of the diversity of its membership as a strength of NICEC and the opportunity afforded for coordination among key actors in computing education in NI.

As indicated under Chair's Communications, committee noted that WG1's programme of work would be paused. One key area in it's original remit was consideration and development of resources promoting career attractiveness. It was noted that future work in this area would require substantial resourcing but that NICEC was well placed to represent key stakeholders for any such initiative.

Ongoing work from WG2 regarding the school's survey is reported under minute 8 below.

8. WG2 - SURVEY UPDATE

With reference to the paper previously circulated via [Basecamp](#), IM gave an overview of preliminary categorical analysis and descriptive data from the survey. Further analytical work is now to be done on correlations between student factors such as confidence, qualification choice and career aspirations.

9. Any Other Business

9.1 RS advised committee that BCS NI AGM will be held on 18th October at 5.30pm at the Ulster University Belfast campus, with a presentation from the BCS President Gilliam Arnold.

Also, for first time ever, BCS Council will hold their annual meeting outside of London, meeting in Belfast 26-27 June 2024. As well as Council meeting, a programme of other activities is planned, including at least one education event.

9.2 MM referenced recent CCEA data available describing data and trends arising from the summer 2023 qualifications, including slight increase in females. It was AGREED to make this data available on [Basecamp](#) (Action: AD, IM)

10. DATE OF NEXT MEETING

To be confirmed.

Actions:

7.2	Liaise on classroom resources available through CAS, Digital Schoolhouse and industry	IB, DC
9.2	Make CCEA 2023 digital technology data available on Basecamp	IM, AD