

# COMPUTING AT SCHOOL SCOTLAND

## Computing Science Education Conference

Saturday 7th November 2015, University of Dundee

In partnership with BCS, SICSA Education, College Development Network, ScotlandIS Education Scotland and the School of Computing at the University of Dundee

Following the success of three annual conferences looking at Computing Science in Primary and Secondary, CAS Scotland are delighted to be partnering with SICSA Education to provide an academic and research strand, and partnering with ScotlandIS and College Development Network to provide an industry and vocational strand.

### Conference Strands

**Broad General Education** - this strand will feature sessions focused on CS education in Early Years, Primary and lower Secondary.

**Secondary Education** - this strand will focus on sessions that support educators delivering Computing qualifications for Secondary school students, primarily National 4, National 5, Higher, Advanced Higher and National Progress Awards.

**Academic and Research strand** - this strand will feature sessions for educators interested in CS education and research. We hope to have teachers and academics wanting to learn more about starting CS educational research as well as sessions discussing current and recent research projects.

**Industry and Vocational strand** - sessions in this strand will have a focus on a dialogue and collaboration between industry and education. Sessions will address questions such as:

- What are the needs of industry in terms of a future workforce?
- How can industry professionals usefully support the work of schools and colleges?
- What gets taught in schools and colleges these days? (A guide to CfE, Nationals and new Highers in CS for non-teachers)

### About Computing At School Scotland

CAS Scotland are a grassroots organisation for computing science education in schools. Anyone interested in CS education may join. CAS is also the teachers association for CS.

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## Call for Proposals

We are seeking session proposals for the conference. We would welcome proposals for workshops, seminars and discussion forums from professionals in education or industry. We would particularly welcome proposals that could be relevant to more than one sector: Early Years, Primary, Secondary, Further and Higher Education or Industry.

- A workshop can either involve Computers or can be 'unplugged' and will involve plenty of participation (1 or 2 hours)
- A seminar will involve a presentation to share information with the audience (15 or 30 minutes)
- A discussion forum will be a small group format where you can chair a small session with participants or a Q & A panel based format with a larger audience (30 minutes or 1 hour)

Proposals can be submitted on the CAS Scotland website: [www.cas.scot](http://www.cas.scot)

### Dates

Call for proposals opens: Friday 13th March 2015  
Call for proposals closes: Friday 1st May 2015  
Notification of acceptance: Friday 29th May 2015

Programme announced and ticket on sale: June 2015  
Date of Conference: Saturday 7th November 2015

### More Information

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### Partners



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## Conference Themes

### Computer Games Design

We're in Dundee so it's only fitting we talk about computer games design and games based learning! We would be interested in session proposals from games designers talking about aspects of their job as well as workshops proposals on using games design environments to allow students to create their own game.

### Visions for the future

How will cutting-edge technology affect teaching in our CS classrooms? How can learning about new advances in technology reinforce students' knowledge about the underlying CS principles and can we use it to make traditional difficult ideas easier to learn?

### Working together

How can we help each other between sectors such as Primary and Secondary education, FE, HE and Industry? We are hoping for session proposals featuring case studies of cross-sector collaborations for this theme, such as industry supporting learning activities in college or university students supporting Primary or Secondary pupils learning Computing Science.

### Engaging young people

We would welcome session proposals on examples of how to use strategies like games based learning, creative teaching and learning approaches or collaboration with enrichment providers to get students buzzing and excited about their learning. Examples might include case studies such as using Minecraft or Raspberry Pis in lessons or lectures.

### Closing the skills gap

How can we help all of our students' progress and gain the skills they need during their time with us?

How can we develop young people's digital skills and their abilities to think computationally?  
How can we best prepare a future workforce for careers in Computing and beyond?

### Theory into practice

We are interested in session proposals where an educator has tried implementing research and whether the results were successful or not! We want to hear about where trying something new has led to increased understanding and attainment, as well as those cases where it hasn't gone so well (particularly when accompanied with a reflection on why that might have happened and how to improve the situation)

### Broadening participation (#include)

We would be interested in sessions or discussions on how we get better at including all students in our education system. How can we encourage more girls to take Computing Science? How can we identify and break down barriers so that students of all minority groups and economic backgrounds view Computing Science as an attractive subject choice and career?