Invitation to Tender – National Centre for Computer Education

Summary
STEM Learning Ltd invites proposals from interested parties to successfully support the National Centre for Computing Education (NCCE) to raise awareness amongst schools and colleges of the support offered by the NCCE, to ensure full engagement and participation.

The National Centre for Computing Education is seeking tenders from interested parties to increase the level of engagements with schools, colleges and teachers in England from the period 11 November 2019 to 31 August 2020.

1. Proposals should be submitted no later than **16:00 on Monday 4 November 2019**.
2. Proposals must be submitted in line with the process and timescales set out in the relevant sections below.

Background
The vision of the NCCE is for every child in every school in England to have a world-leading computing education. The NCCE and its associated programmes has two central drivers:

- to generate pupil interest and demand for computer science qualifications in the future and;
- to upskill teachers to be more confident in their delivery of Computing.

The Consortium of STEM Learning, BCS, The Chartered Institute of IT, and the Raspberry Pi Foundation have been leading this work drawing on wide experience of delivering outstanding CPD and support for teachers at scale, a track record for high quality learning content, deep subject knowledge, and unrivalled networks. We have started to put this in place by:

- Establishing the National Centre for Computing Education as a virtual institution to provide leadership, expertise, evidence-based interventions; free, quality-assured curriculum-linked resources; and online CPD.
- Creating a Network of Computing Hubs to lead the delivery of computing CPD in local areas, at no-cost to priority schools and low-cost to all schools. The ambition is to provide face to face CPD for over 21,000 teachers, free online CPD for over 25,000 with the focus on priority schools and to provide over 500 hours of free resources.
- Establishing the Computer Science Accelerator (CSA) Programme to provide free high quality professional development to upskill and certify 8,000 teachers with CPD to support their teaching and delivery of the Computer Science GCSE programme.

Aims and objectives of the NCCE and its associated programmes
To enable the NCCE to achieve its vision for the future of computing, the NCCE aims to:

- *Support and improve the provision of computing education in England State Funded Schools*. Evidence suggests that, due to a lack of teacher expertise, schools are currently finding it difficult to teach the full computing curriculum) at primary and secondary. A survey by the Royal Society showed that 32% of primary school teachers and 44% of secondary school computing teachers in England felt more

confident teaching the earlier stages of the curriculum where there is less of a computer science focus. Pupils may therefore lack the necessary concepts that act as a foundation for computer science

- *Increase teacher confidence in teaching the computing curriculum.* Research from the Royal Society shows that the experience, quality and confidence of teachers to deliver the computing curriculum at primary and secondary varies greatly across the country. Many existing teachers do not have sufficient expertise to teach the new subject. It is estimated that there are about 8,000 secondary computing teachers in England without a post-A level qualification in computer science or a related subject. In addition, teachers may not be able adequately to communicate the relevance and importance of computing and digital skills for their pupils' careers.

- *Drive up participation and attainment in computer science at GCSE, AS and A Level.* Entries to computer science are varied across the country, with 30% of state-funded schools in England having no GCSE entries to computer science in 2016/17 and 33 local authorities having over 40% of state-funded schools that do not offer GCSE computer science. These local authorities include a number of the Authority's priority areas for support, defined as category 5 and 6 Achieving Excellence Areas

Requirements
We are looking to work with an organisation (or organisations) to help with the delivery of aspects of our demand generation strategy across England, over the contract term noted above. Refer to attached diagram in Annex 1 for outline of Demand Generation framework.

The National Centre for Computing Education is seeking tenders from interested parties to deliver key interventions to achieve significant engagements enabling all primary and secondary schools and colleges across England to access the free, high-quality professional development of the NCCE. All schools will be supported, with a specific programme – the Computer Science Accelerator (CSA) programme – additionally targeting thousands of teachers to upskill them with the subject knowledge to successfully deliver GCSE Computer Science (GCSE CS). This CSA programme offers access to face-to-face CPD, online CPD and other forms of support, to ensure teachers meet the criteria.

The successful bidder(s) may work nationally and regionally, with the support complementing not competing with the demand generation messages being developed by Computing Hubs.

Monitoring performance and impact
The key deliverable in terms of monitoring on-going performance will be a monthly report on progress due at the end of each month commencing December 2019 using standard templates provided by STEM Learning. This report will cover a mix of quantitative and qualitative measures and data, to demonstrate the impact of key interventions. The successful bidder will also participate in weekly Keep in Touch (KiT) calls to prioritise work and address issues and blockages in a timely manner.

The report will also provide an overview of the level and scope of activity achieved over the appropriate period with an assessment of the impact of each intervention. Measurements against industry standards should be suggested.
The main measures within the reporting will be:

1. **Reach** of each proposed intervention to stimulate demand for the NCCE and its associated programmes and to raise curiosity for educators to engage with this as part of their professional life. Interventions and/or activity will support key persona and audiences to ensure messaging and focus of approach is appropriate to individual audiences. In addition, types of institutions may also be targeted, where the number of pupils being taught computing is low and in cases where the attainment in computing is low.

   Reporting should illustrate number of engagement activities, their reach and number of unique participants, names and number of unique schools engaged during the reporting period. This report should also include the number of state funded establishments broken down by primary and secondary, and by type of engagement / activity.

2. **Quality** of the support offered by the bidder, to include a review of the appropriateness of the interventions designed, developed and delivered.

In addition, the successful bidder will be expected to provide STEM Learning with appropriate management information and operational details for the purpose of measuring and improving the impact of its work.

Scope of works
Bidders are requested to compile a response to this tender document detailing the following:

- provide an outline plan for engaging with schools and colleges to drive demand for the National Centre for Computing Education in line with the diagram in Annex 1;
- create a plan of key interventions to engage with particular segments of the whole market to drive take-up of support from the NCCE. Interventions may focus on specific aspects of the Demand Generation framework or across all aspects. This should be detailed in the response;
- demonstrate how behaviours may be influenced as part of the key interventions and engagements process;
- outline processes to monitor the delivery of the plan to ensure sufficient reach;
- adapt work, if necessary, based on feedback from users and the success of aspects of proposed interventions;
- measure the impact of this work in terms of engagement and reach.

Funding available
Bidders are requested to cost their proposals for the work outlined above, with the budget available being between £20,000 and £100,000. Value for money will be a key consideration during the assessment of tender responses.

Format of Proposals
Proposals should be set out to clearly detail:

- a vision for what the contract holder will achieve, along with relevant qualitative and quantitative metrics;
- a summary of relevant experience, demonstrating the credibility and current financial and operational scope of the organisation. This should include evidence of its track record and demonstrate its understanding of the education and skills environments;
- an outline project plan of activities to be undertaken, including appropriate key date/milestones and deliverables;
- short descriptions of key personnel involved in implementing the plan, including relevant experience and qualifications;
- reference sites (as URLs) for examples of relevant work or experience;
- an assessment of the risks associated with the work and how these will be managed rationale or breakdown to clearly demonstrate how funding will be utilized.

Evaluation criteria
Proposals will be evaluated against the following criteria:

- the organisation's relevant experience of proposing organisation and its team;
- understanding of national as well as regional priorities in terms of computing education and skills;
- a well thought out operational plan for achieving this tender;
- ability to demonstrate credibility and track record in driving innovation and creativity in approaches whilst maintaining quality of service;
- commitment to an ethos of partnership working with the NCCE and all appropriate stakeholders;
- value for money;
- how the organisation will comply with the GDPR regulations in their operation of this contract.

Submission of Proposals
The deadline for receipt of submissions is **16:00 Monday 4 November 2019**. Late submissions will not be accepted. It is the responsibility of the bidder to ensure that proposals arrive by the deadline stated. All submissions will be acknowledged with a notification of receipt.

An electronic copy of the proposal should be received in PDF format by this deadline. This is an electronic only submission process, therefore all documentation must be submitted in PDF format as a single zipped folder if the size of the submission in greater than 10Mb.

Proposals should be no longer than 10 sides of A4 in a font no smaller than Arial 11. If the proposal exceeds this limit, evaluators will be advised to disregard any information outside the limit. CVs of people involved can be submitted as appendices and will not be included in the 10 page limit.

Proposals should be emailed to: Martin George, Project Officer, STEM Learning Ltd

STEM Learning Ltd reserves the right not to award a contract.

Enquiries
Enquiries about this tender should be directed via email, in the first instance, to:

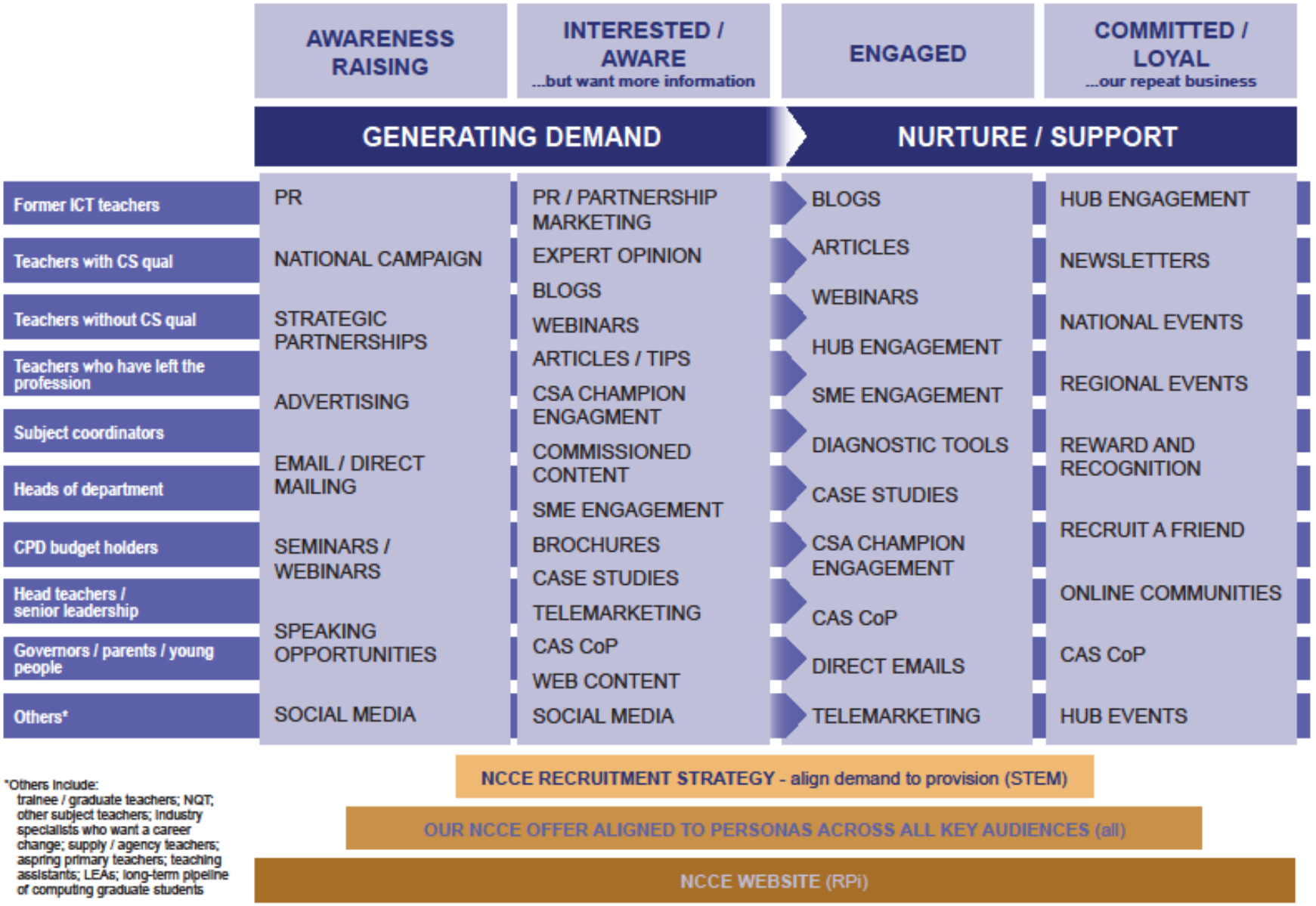
m.george@stem.org.uk
Martin George, Project Officer
STEM Learning Ltd
National STEM Learning Centre

Annex 1 – Demand Generation Framework

The Demand Generation Framework sets out a set of priorities to raise awareness/share initial information to thereafter convert 'interest' into actual engagement and re-engagement. This aligns to individual personas work to refine key messaging to specific audiences.

Abbreviations:

- CAS CoP - CAS Communities of Practice. CAS (Computing at School) is part of BCS, The Chartered Institute for IT, through the BCS Academy of Computing. Membership of CAS is open to teachers, parents, governors, exam boards, industry, professional societies, and universities
- CS - Computer Science
- SME – Subject Matter Experts. Subject Matter Experts (SME) are educational experts, working regionally to support the NCCE to work in schools in most need of support with a particular focus on targeting schools that are not currently offering GCSE Computer Science. Positioned across England, they will reach across a wide geographical area, focused on working directly with schools and colleges at a strategic level to develop an action plan to overcome barriers to delivering Computing.
- CSA Programme - The Computer Science Accelerator (CSA) programme is a personalised professional development programme, designed to support secondary teachers of computing or computer science https://www.stem.org.uk/national-centre-for-computing-education/cs-accelerator-programme.
- CSA Champion - The CSA Champion will drive and maintain awareness for the active engagement of teachers with the CS Accelerator programme by acting as a mentor to participants to ensure there are a sufficient number of teachers actively engaged in the programme. The CSA Champion may also be asked to develop a working relationship with and support teachers where their school currently does not offer GCSE computer science or indeed any computer science at all.


AWARENESS RAISING
INTERESTED / AWARE
...but want more information
ENGAGED
COMMITTED / LOYAL
...our repeat business
GENERATING DEMAND
NURTURE / SUPPORT
Former ICT teachers
Teachers with CS qual
Teachers without CS qual
Teachers who have left the profession
Subject coordinators
Heads of department
CPD budget holders
Head teachers / senior leadership
Governors / parents / young people
Others*
PR
NATIONAL CAMPAIGN
STRATEGIC PARTNERSHIPS
ADVERTISING
EMAIL / DIRECT MAILING
SEMINARS / WEBINARS
SPEAKING OPPORTUNITIES
SOCIAL MEDIA
PR / PARTNERSHIP MARKETING
EXPERT OPINION
BLOGS
WEBINARS
ARTICLES / TIPS
CSA CHAMPION ENGAGMENT
COMMISSIONED CONTENT
SME ENGAGEMENT
BROCHURES
CASE STUDIES
TELEMARKETING
CAS CoP
WEB CONTENT
SOCIAL MEDIA
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HUB ENGAGEMENT
SME ENGAGEMENT
DIAGNOSTIC TOOLS
CASE STUDIES
CSA CHAMPION ENGAGEMENT
CAS CoP
DIRECT EMAILS
TELEMARKETING
HUB ENGAGEMENT
NEWSLETTERS
NATIONAL EVENTS
REGIONAL EVENTS
REWARD AND RECOGNITION
RECRUIT A FRIEND
ONLINE COMMUNITIES
CAS CoP
HUB EVENTS
*Others include:
trainee / graduate teachers; NQT; other subject teachers; industry specialists who want a career change; supply / agency teachers; aspring primary teachers; teaching assistants; LEAs; long-term pipeline of computing graduate students
NCCE RECRUITMENT STRATEGY - align demand to provision (STEM)
OUR NCCE OFFER ALIGNED TO PERSONAS ACROSS ALL KEY AUDIENCES (all)
NCCE WEBSITE (RPi)