

# Head of Computer Science September 2019



Highgate is looking for a well-qualified and innovative computing specialist to become Head of Computer Science in this academically selective, coeducational Senior School. The successful candidate will be interested in problem solving, and in ways of making programming accessible to pupils aged from 11 to 18 as part of the School's curriculum and as part of its extra-curricular offering. They will lead the development and share the teaching of IGCSE and A Level courses; they will also work closely with other departments whose subjects require the manipulation of data. Recent experience of teaching examination classes and evidence of extracurricular involvement is important.

The school has in place DfE recognised arrangements for the induction Year and the confirmation of NQT status and has considerable experience of and success in guiding new teachers to qualified status. For all teachers new to Highgate, regardless of experience, there is a strong and supportive framework of induction to the school.

There are opportunities to contribute to the pastoral and co-curricular life at the school, both aspects of which are valued at Highgate.

### The Curriculum



All pupils have compulsory Computing lessons at KS3 and the curriculum develops pupils' computational thinking and computer programming skills. We use a range of computer programming languages to teach computational thinking concepts, candidates SO should have a good understanding of Python; experience with Javascript, JQuery or Lua would also be useful, but this is not essential.

Candidates should be familiar with HTML and CSS for web design.

Pupils at Highgate currently take the Cambridge IGCSE Computer Science course, though the incoming Head of Computer Science would be asked to consider alternative syllabuses. The two parts of the current specification are the theory of Computer Science and problem solving and programming. Computer Science has been offered at A level since September 2017 and is already very popular.

The department also provides opportunities for pupils to develop their coding skills and creativity in problem solving through extra-curricular clubs and preparation for national computer programming competitions. Highgate pupils have been very successful in competitions featuring the Raspberry Pi and Microsoft Kodu.

### The Department

Two senior Mathematics teachers, including the Director of Studies, and the Head of E-Learning support the Head of Computer Science in the delivery of the curriculum throughout the school. The Department is well-resourced; computing lessons take place in purpose built ICT suites.

Teachers at Highgate enjoy a welcoming, comfortable and exceptionally wellresourced environment and are provided with significant assistance from a range of support staff. Salaries are competitive. The school pays the employer's contribution to the Teachers' Pension Scheme.

Mark O'Connor, the Head of Computing (<u>mark.oconnor@highgateschool.org.uk</u>) or James Newton, the Deputy Head (Academic) (<u>james newton@highgateschool.org.uk</u>) are very happy to answer any questions.

### **APPLICATION PROCEDURE**

Please complete the on-line application form and attach a full curriculum vitae including the names, addresses, telephone numbers and email contacts of two referees. **Closing date 8:00am on 28 February 2019 but applications will be considered as they are received.** 

## Criteria for the post of Head of Computing

(to be read in conjunction with the details of the post)

### 1 Essential professional criteria

Criteria	How will these be tested or verified?
Excellent grades at A level in or equivalent qualifications	Original certificate(s)
	Questions about subject specialisation
A good degree in computing, or a subject where computer science is used for problem solving and data manipulation	Original degree certificate(s)
	Questions about subject specialisation (and course content for more recent graduates)
	Opportunities at interview to discuss techniques for teaching set topics
The ability to establish good relations with colleagues and pupils.	Opportunities at interview to recount experiences where these skills have been demonstrated
	Questions which referees will be asked as part of the confidential reference request
	A 50-minute lesson to be taught to a Key stage 3 or 4 class
Excellent communication skills, both generally	Two panel interviews
and in particular when communicating concepts in computing	Opportunities at interview to explain a computing concept
	Lesson, as above
The ability to reflect sensitively and constructively on their teaching practice	Opportunities at interview to reflect on the taught lesson
Willingness to work within the framework of the departmental ethos	Opportunities at interview to discuss this ethos
Sympathy with and knowledge of fundamental British values	Question at interview to test this
Awareness and understanding of safeguarding and welfare of children	Questions at interview to test attitudes towards and knowledge of children's safeguarding and welfare
	Questions which referees will be asked as part of the confidential reference request

### 2 Desirable professional criteria

Criteria	How will these be tested?
A teaching qualification (eg PGCE, GTP)	Original certificate
Experience of working with young people in an academic environment	Lesson, see above
A willingness to be involved in the wider life of the department (eg clubs, societies and competitions) and school.	Opportunities at interview to recount experience of running or participating in such activities or to give ideas for these

### 3 Person specification

Highgate seeks to appoint teachers who will have, in addition to the professional qualities outlined above, the following proven personal qualities, or the potential to develop them. At interview, candidates will have the opportunity to demonstrate or give an account of these attributes.

- Profound and continuing interest in the academic subject / s to be taught.
- The depth of knowledge and agility of mind to allow flexibility in lessons, adapting delivery as appropriate in the light of pupils' responses.
- Empathy with pupils across the age and ability spectrum at Highgate and the ability to implement a range of teaching strategies to cater for each individual pupil.
- Capacity to deal sensitively with problems raised by pupils, in line with Highgate's pastoral policies and sanctions system, working in partnership with Highgate's designated staff i/c pastoral care.
- Ability to create effective rapport and a sound relationship with pupils, earning their respect and trust but maintaining proper professional boundaries by not deliberately courting popularity or friendship.
- The energy, dynamism and stamina to contribute broadly to the life of a busy coeducational independent day school.
- Willingness to contribute to the extensive range of activities provided for pupils and to support them in their co-curricular pursuits.
- Capacity for industry and initiative in both independent work and as part of teams of colleagues in academic work, pastoral care, sports and co-curricular activities.
- Awareness and understanding of matters relating to the personal, social, health and emotional development of Highgate's pupils.
- Willingness and ability to liaise effectively and professionally between pupils, staff and parents when required, making accurate records of these exchanges.
- Patience and thoughtfulness to see any issues that may arise with pupils, parents or colleagues from a variety of perspectives.
- The ability to defuse difficult situations using different strategies such as careful listening, sensitive use of humour, praise and recognition where due, utilising the School's reward system.
- Retention of a sense of perspective and, on occasion, the invaluable ability to laugh at oneself.