#### JOB DESCRIPTION

Job Title:

Senior Data Analyst

**Department / Business Unit:** 

OCR - Assessment - Research & Technical Standards

Location:

Triangle, Cambridge

Reports to (job title):

Principal Manger, Operational Research

### JOB PURPOSE

The Senior Data Analyst role exists to...

- Provide technical leadership and management of the work of the 'data and analytics' function within the RTS team, delivering a range of data reporting and analysis services
- Provide expertise and guidance on issues around data, systems and infrastructure
- Lead research and analytics projects to support the validity, reliability, fairness, and regulatory compliance of OCR assessments

## PRINCIPAL ACCOUNTABILITIES (job dimensions)

### Data & Analytics:

- respond to data requests, accessing and analysing data from a range of sources
- analyse and interpret data to help colleagues understand the information presented
   provide expertise and input on assessment, data and systems to colleagues
- deliver 'BAU' analysis and reporting to support live assessment delivery
- · improve to existing 'BAU' activities and develop new solutions
- carry out projects to improve performance around assessment, data and systems Leadership & Management:
- line manage and support colleagues in the team (as required) participate in the wider management and direction of the RTS team Strategic and expert input (on assessment matters):
- provide input to decision-making forums across and beyond the organisation
- contribute to the design, delivery and evaluation of business processes
- contribute to the development and implementation of assessment principles and practice

# As a Senior Data Analyst, you will...

- carry out complex data handling and manipulation activities, and report findings
- draw on advanced programming skills to manipulate and analyse data accurately and efficiently
- design and maintain (programmatic) solutions to complex data queries and processing
- · report and advise on complex data and statistical evidence related to assessment
- present data in an appropriate way, creating visualisations that aid interpretation
- respond to queries about assessment, data and systems from colleagues across and beyond OCR

- represent RTS, providing input to working groups around assessment, data and systems
- lead on delivering business critical data analyses for live assessment, including associated planning, quality assurance, evaluation and contingency activity
- lead and direct the production of statistical data used for setting and maintaining standards
- · work with teams across OCR to support delivery of accurate results on time
- drive improvements to the efficiency and reliability of routine, business critical data analysis
- oversee RTS projects around assessment, data and systems issues
- support the development and evaluation of assessment products, continuous improvement of assessment activities, and research into assessment issues
- plan, advise on and carry out technical analyses of assessment functioning and performance
- interpret and provide guidance on the output of investigations, reporting findings to a range of audiences
- drive improvement of systems and infrastructure across the organisation
- line manage one or more colleagues (e.g. Data Analyst, Assistant Data Analyst, Data Apprentice) – not essential
- act as a mentor for one or more less experienced colleagues not essential
- form part of the RTS management team, dealing with personnel and strategic issues
   plan and deliver the RTS Data & Analytics annual programme
- advise on, manage and carry out work for the JCQ technical committee/s (STAG)
- sit on OCR / CA working groups in a senior capacity, representing RTS/OCR
- support process improvement around the quality and delivery of OCR assessments
- make recommendations to Head of RTS and/or Director of Assessment on technical aspects of assessment delivery
- drive improvements to OCR assessment practice

# KNOWLEDGE, SKILLS AND EXPERIENCE (person specification)

### **Qualifications / Background**

You will be ...

 a confident, capable and experienced data analyst / programmer who is comfortable analysing and interpreting large and complex data sets

You will have...

- a degree level (Level 6) qualification in a relevant discipline [desirable]
- recognised technical qualification/s in programming [desirable]
- certification in any or all of: SAS programming, SAS management, SAS data integration, SAS business intelligence [desirable]

#### Skills

You need expert skills in these areas...

- numeracy and statistics
- programming and/or data handling and/or computer systems
- written and verbal communication
- collaboration and management
- problem solving

You need to be capable of...

- logical thinking
- evaluating and understanding evidence
- · explaining outcomes and results clearly to different audiences
- · working accurately under pressure
- working to deadlines and prioritising projects

### **Experience**

You will be ...

- familiar with variety of software packages and programming languages, and good at learning new ones
- · interested in data structures and systems, with a strong understanding of industry practice
- · interested in technical aspects of educational assessment theory and practice
- used to writing and running complex programs, and carrying out business critical analyses in high pressure environments
- familiar with Cambridge Assessments systems for assessment processing and data handling

#### **Behaviours**

#### Important qualities:

- determined and resourceful a 'can do' attitude
- flexible able to adapt quickly and positively
- open prepared to listen to others and work through difficult issues
- collaborative able to work in a team, contributing and leading
- diplomatic supportive and respectful of others
- · meticulous with an eye for detail

# **OTHER INFORMATION**

Organisation and context

- RTS Data Analysts contribute to the data handling and analysis capabilities of RTS, the Assessment directorate, and OCR.
- They understand the variety of existing data sources and systems used by Cambridge
  Assessment and interrogate them efficiently and accurately using well developed programming
  skills.
- They combine this expertise with a deep understanding of key issues in educational
  assessment, and strong numerical and statistical skills, to advise on and support the delivery
  and evaluation of live assessments, alongside the development of new assessments.
- They work independently, drawing on their own initiative, resourcefulness and skills, as well as working closely with colleagues in the team, so all output is accurate and reliable.
- Members of the RTS senior team are experts in a wide range of aspects of educational
  assessment and play a key role in supporting the validity, reliability, fairness, and regulatory
  compliance of OCR assessments.
- They have considerable personal responsibility and accountability on several fronts, including:

technical leadership; strategic leadership (of the team); personnel management; visibility and engagement (beyond RTS, and including with external stakeholders and colleagues).

# Management

- The complexity and demands of this role come from the technical knowledge and skills required, and the responsibility for accurate and reliable output.
- It does not necessarily include line management, but can do if the post holder wishes to develop these skills; it can also include mentoring and/or supervision of less experienced colleagues.

## Likely to be recruited from...

 This role is likely to suit a data analyst or researcher who has gained substantial experience in the field of educational assessment (or similar), is highly technically proficient and knowledgeable, and is looking to take on greater responsibility.

### Likely to progress to...

• From this position, the post holder could progress to a more senior technical role, or move into (or across to) senior managerial and/or operational roles.