

Role Description

Statistician



Cluster	Separate Agency
Agency	NSW Education Standards Authority
Division/Branch/Unit	Psychometrics and Analytics
Location	117 Clarence Street Sydney
Classification/Grade/Band	Clerk Grade 7/8
Role Number	B1220
ANZSCO Code	224113
PCAT Code	2119192
Date of Approval	30 June 2017
Agency Website	www.educationstandards.nsw.edu.au

Agency overview

The NSW Education Standards Authority ('NESA') was formally established on 1 January 2017 to improve quality teaching and student learning across all schools and school sectors. It is responsible for the curriculum, assessment, teacher accreditation and regulatory standards in NSW schools, and accreditation of early childhood teachers.

Primary purpose of the role

The Statistician undertakes research in educational measurement to support the development and application of assessment and examinations policy and practice, provides advice and guidance to NESA and its committees and others in the areas of educational measurement and assessment, and manages and conducts projects and processes to support the NESA's state-wide assessment and examination programs.

Key accountabilities

- Conduct high level research, statistical analysis and review of complex issues and proposals; recommend and implement appropriate action.
- Prepare research papers and represent NESA at conferences, meetings, presentations.
- Provide and/or oversee high level technical advice, information and support to NESA officers and its committees on complex and diverse issues in measurement and research.
- Write programs in R or python that automate routine statistical analyses and processing tasks.
- Review and evaluate processes and recommend improvements.

Key challenges

- Working on multiple and complex research projects with tight time frames.
- Encouraging progression towards modern assessment systems.

Key relationships

Who	Why
Internal	
Unit head	<ul style="list-style-type: none">Escalate issues, keep informed, provide recommendations and receive directions for new research.
Work team	<ul style="list-style-type: none">Collaborate on projects and tasks.Provide status updates on assigned tasks, issues and priorities.
NESA staff	<ul style="list-style-type: none">Provide statistical and measurement advice.Present research proposals and findings.
External	
Academics	<ul style="list-style-type: none">Present academic research.Participate in research discussions.

Role dimensions

Decision making

This role operates with some autonomy, preparing research proposals and conducting approved research studies. The Statistician escalates issues which cannot be resolved independently along with recommended actions to the Head, Measurement and Research Services unit.

Reporting line

The Statistician reports to the Head, Measurement and Research Services unit.

Essential requirements

Completed degree in psychometrics, educational measurement, statistics, quantitative social science or other related field.

Experience using statistical applications, such as R, SAS, SPSS, Stata or Matlab, or psychometric applications, such as RUMM2030, ConQuest, WinSTEPS.





Capabilities for the role

The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

Capability summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

NSW Public Sector Capability Framework

Capability Group	Capability Name	Level
 Personal Attributes	Display Resilience and Courage	Adept
	Act with Integrity	Intermediate
	Manage Self	Intermediate
	Value Diversity	Intermediate
 Relationships	Communicate Effectively	Adept
	Commit to Customer Service	Adept
	Work Collaboratively	Intermediate
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Intermediate
	Plan and Prioritise	Intermediate
	Think and Solve Problems	Adept
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Foundational
	Technology	Intermediate
	Procurement and Contract Management	Foundational
	Project Management	Intermediate

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Personal Attributes Manage Self	Intermediate	<ul style="list-style-type: none"> Adapt existing skills to new situations Show commitment to achieving work goals Show awareness of own strengths and areas for growth and develop and apply new skills Seek feedback from colleagues and stakeholders Maintain own motivation when tasks become difficult
Relationships Communicate Effectively	Adept	<ul style="list-style-type: none"> Tailor communication to the audience Clearly explain complex concepts and arguments to individuals and groups Monitor own and others' non-verbal cues and adapt where necessary Create opportunities for others to be heard

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Results Deliver Results	Intermediate	<ul style="list-style-type: none"> Actively listen to others and clarify own understanding Write fluently in a range of styles and formats Complete work tasks to agreed budgets, timeframes and standards Take the initiative to progress and deliver own and team/unit work Contribute to allocation of responsibilities and resources to ensure achievement of team/unit goals Seek and apply specialist advice when required
Results Think and Solve Problems	Adept	<ul style="list-style-type: none"> Research and analyse information, identify interrelationships and make recommendations based on relevant evidence Anticipate, identify and address issues and potential problems and select the most effective solutions from a range of option Participate in and contribute to team/unit initiatives to resolve common issues or barriers to effectiveness Identify and share business process improvements to enhance effectiveness
Business Enablers Technology	Intermediate	<ul style="list-style-type: none"> Apply computer applications that enable performance of more complex tasks Apply practical skills in the use of relevant technology Make effective use of records, information and knowledge management functions and systems Understand and comply with information and communications security and acceptable use policies Support the implementation of systems improvement initiatives and the introduction and roll-out of new technologies