Role Description **Statistician**

Cluster	Education
Agency	Department of Education
Division/Branch/Unit	Centre for Education Statistics Evaluation (CESE)
Role number	195321
Classification/Grade/Band	Clerk Grade 11/12
Senior executive work level standards	Not Applicable
ANZSCO Code	139999
PCAT Code	2119192
Date of Approval	24 October 2016
Agency Website	https://education.nsw.gov.au

Agency overview

The NSW Department of Education serves the community by providing world-class education for students of all ages. We ensure young children get the best start in life by supporting and regulating the early childhood education sector. We are the largest provider of public education in Australia with responsibility for delivering high-quality public education to two-thirds of the NSW student population. We are committed to fostering vibrant, sustainable and high-performing vocational and higher education sectors. We are responsible for enacting NSW Government policy, driving improvement in education, and overseeing policy, funding and compliance issues relating to non-government schools. We respect and value Aboriginal and Torres Strait Islander people as First Peoples of Australia.

Primary purpose of the role

The role leads the in-depth analysis and provision of accurate and timely statistical information that supports senior management of the directorate and the Department in their reporting, policy development and decision making processes concerning the educational delivery in NSW Public Schools with a view to improving education outcomes.

Key accountabilities

- Perform high level research, statistical analysis and review of complex educational issues, and produce briefings, publish technical reports and develop advice for senior management.
- Undertake advanced statistical analysis and modelling of large and complex data sets using specialised computer software.
- Manage and oversee statistical projects, including creating statistical and research plans, reviewing results for reasonableness and accuracy and preparing technical reports.
- Supervise junior analyst(s) to ensure appropriate statistical techniques are applied to education data to generate new knowledge and a rigorous evidence base for policy development.



- Promote and support the development and use of statistical techniques within the department that are valuable in the analysis of education data.
- Represent the Department at state and national statistical forums to put the Department's view and also facilitate the exchange of ideas and analysis techniques.

Key challenges

- Managing multiple and complex research projects with tight time frames.
- Providing high quality statistical advice and analysis in a responsive and timely manner that meets the needs of internal and external clients.
- Develop better ways of managing and analysing data to address challenging statistical research questions.

Key relationships

Who	Why
Internal	
Senior staff in CESE and senior managers	 Drive the development and maintenance of effective working relationships to foster collaboration, consultation and engagement on statistical data analysis.
External	
NSW Central Agencies, other NSW State Government agencies, Commonwealth and other state and territory agencies and non-government education stakeholders	 Drive the development and maintenance of effective working relationships to facilitate collaboration, consultation and engagement on statistical data analysis initiatives. Represent NSW's position at state and national statistical forums.

Role dimensions

Decision making

This role:

- has a high level of autonomy, uses initiative and is fully accountable for the delivery of high quality work on time and within budget
- makes high level decisions and acts independently to develop strategies and solve problems to achieve the Centre, Department and Government reforms and priorities
- consults with the Director in relation to decisions that have wide reaching implications, exceed the role's financial delegations, are contentious and /or are likely to have an impact on stakeholders, and in relation to decisions that require significant change to project outcomes or timeframes
- submits reports, analyses, briefings, correspondence, speeches and other written material in a final high quality manner with minimal input required from the supervisor.

Reporting line

The role reports to a Director.

Direct reports

The role has 0-2 direct reports.



Budget/Expenditure

Nil.

Key knowledge and experience

Current or completed PhD or postgraduate degree in a quantitative discipline, such as statistics, economics or psychology.

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

Knowledge of, and commitment to implementing the Department's Aboriginal Education Policy and upholding the Department's Partnership Agreement with the NSW AECG and to ensure quality outcomes for Aboriginal people.

Essential requirements

Valid Working with Children Check for paid employment

Capabilities for the role

The <u>NSW public sector capability framework</u> describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into focus capabilities and complementary capabilities.

Focus capabilities

Focus capabilities are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

Capability group/sets	Capability name	Behavioural indicators	Level
Personal Attributes	Manage Self Show drive and motivation, an ability to self-reflect and a commitment to learning	 Act as a professional role model for colleagues, set high personal goals and take pride in their achievement Actively seek, reflect and act on feedback on own performance Translate negative feedback into an opportunity to improve Take the initiative and act in a decisive way 	Advanced





Communicate Effectively

Communicate clearly, actively listen to others, and respond with understanding and respect

- Demonstrate a strong interest in new knowledge and emerging practices relevant to the organisation
- Present with credibility, engage diverse audiences and test levels of understanding
- Translate technical and complex information clearly and concisely for diverse audiences
- Create opportunities for others to contribute to discussion and debate
- Contribute to and promote information sharing across the organisation
- Manage complex communications that involve understanding and responding to multiple and divergent viewpoints
- Explore creative ways to engage diverse audiences and communicate information
- Adjust style and approach to optimise outcomes
- Write fluently and persuasively in plain English and in a range of styles and formats

Advanced

Advanced

Work Collaboratively

Collaborate with others and value their contribution

- Recognise outcomes achieved through effective collaboration between teams
- Build cooperation and overcome barriers to information sharing, communication and collaboration across the organisation and across government
- Facilitate opportunities to engage and collaborate with stakeholders to develop joint solutions
- Network extensively across government and organisations to increase collaboration
- Encourage others to use appropriate collaboration approaches and tools, including digital technologies



Deliver Results

Achieve results through the efficient use of resources and a commitment to quality outcomes

- Use own and others' expertise to achieve outcomes, and take responsibility for delivering intended outcomes
- Make sure staff understand expected goals and acknowledge staff success in achieving these
- Identify resource needs and ensure goals are achieved within set budgets and deadlines
- Use business data to evaluate outcomes and inform continuous improvement
- Identify priorities that need to change and ensure the allocation of resources meets new business needs
- Ensure that the financial implications of changed priorities are explicit and budgeted for

Think and Solve Problems

Advanced

Adept



Think, analyse and consider the • broader context to develop practical solutions

- Undertake objective, critical analysis to draw accurate conclusions that recognise and manage contextual issues
- Work through issues, weigh up alternatives and identify the most effective solutions in collaboration with others
- Take account of the wider business context when considering options to resolve issues
- Explore a range of possibilities and creative alternatives to contribute to system, process and business improvements
- Implement systems and processes that are underpinned by high-quality research and analysis
- Look for opportunities to design innovative solutions to meet user needs and service demands
- Evaluate the performance and effectiveness of services, policies and programs against clear criteria



Project Management

Understand and apply effective planning, coordination and control methods

- Understand all components of the project management process, including the need to consider change management to realise business benefits
- Prepare clear project proposals and accurate estimates of required costs and resources
- Establish performance outcomes and measures for key project goals, and define monitoring, reporting and communication requirements
- Identify and evaluate risks associated with the project and develop mitigation strategies
- Identify and consult stakeholders to inform the project strategy
- Communicate the project's objectives and its expected benefits
- Monitor the completion of project milestones against goals and take necessary action
- Evaluate progress and identify improvements to inform future projects



Manage Reform and Change

Support, promote and champion change, and assist others to engage with change

- Support teams in developing new ways of working and generating innovative ideas to approach challenges
- Actively promote change processes to staff and participate in communicating change initiatives across the organisation
- Provide guidance, coaching and direction to others who are managing uncertainty and change
- Engage staff in change processes and provide clear guidance, coaching and support

Adept

Adept



 Identify cultural barriers to change and implement strategies to address these

Complementary capabilities

Complementary capabilities are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

apability oup/sets	Capability name	Description	Level
Personal Attributes	Display Resilience and Courage	views, and willing to accept and commit to change	Adept
	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Adept
	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Adept
Relationships	Commit to Customer Service	Provide customer-focused services in line with public sector and organisational objectives	Adept
	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Adept
Results	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Adept
	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Adept
Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
	Technology	Understand and use available technologies to maximise efficiencies and effectiveness	Adept
	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Intermediate
People Management	Manage and Develop People	Engage and motivate staff, and develop capability and potential in others	Intermediate
	Inspire Direction and Purpose	Communicate goals, priorities and vision, and recognise achievements	Adept
	Optimise Business Outcomes	Manage people and resources effectively to achieve public value	Intermediate

