

At AITSL, we believe every Australian child deserves a quality education. This relies on quality teaching and effective school leadership. We drive effective and inspiring teaching and school leadership, to improve student learning in the classroom.

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<b>Position Title</b>	Principal, Data Science
<b>Business Unit</b>	Australian Teacher Workforce Data
<b>Leader Title</b>	Director, Teacher Workforce
<b>Employment status</b>	Full time, until December 2025
<b>Date</b>	29 May 2024

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### About this role

The Australian Teacher Workforce Data (ATWD) initiative is a nationally endorsed data linkage project that provides comprehensive, longitudinal data on teacher supply and the teacher workforce to support policy, workforce planning, teachers, and school leaders across Australia. The project is now expanding to provide national projections of teacher workforce supply and demand.

The Principal, Data Science, is a senior manager role within the ATWD and is responsible for the management of the ATWD data science team, as well as the strategic development and publication of data related products. The data science team provides the analysis, programming and technical support for the collection and presentation of data related to Initial Teacher Education and the Australian Teacher Workforce <https://www.aitsl.edu.au/research/australian-teacher-workforce-data/key-metrics-dashboard>.

Working closely with ATWD's Lead Data Scientist, this position is pivotal to the delivery of annual data that will engage stakeholders and provide critical evidence-based insights for workforce policy and planning.

Utilising a strong background and/or experience as a statistician and/or data scientist, this role will oversee a team of technical data analysts in providing data programming, data quality and integrity analysis, statistical analysis for the development of ATWD reports, digital outputs, and publications.

### What you'll be doing

This role requires a deep understanding of statistical methodologies alongside strong leadership capabilities to ensure that key deliverables, workflows, and responsibilities are met by the ATWD data science team.

To achieve this, the role will:

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- Plan and manage the statistical analysis of the ATWD data including approach, process, and outputs.
- Lead and develop the ATWD data science team to contribute to the wider ATWD initiative. Foster a culture of learning, development, and shared accountability across the team, supporting the professional growth and effectively managing the performance of team members.
- Liaise with various ATWD stakeholders and advise on solutions to effectively address opportunities for development across ATWD's use of data-related products.
- Work collaboratively with ATWD's Lead Data Scientist, provide leadership on the use of statistical methodologies and modelling for ATWD's data-related products.
- Provide expert advice on data management (including evaluation of data quality and completeness), data transformation, programming, and analysis to ensure the viability of the ATWD and the ATWD outputs to address policy questions.
- Work closely with the ATWD Technical Working Group and the ATWD Oversight Board to ensure ongoing data quality and continuous improvement, including maintenance of data specifications for various projects.
- Provide insights to the ATWD publications team, managing the process of data preparation for analysis, reporting and presentation purposes.

## What we're looking for

As a senior manager and people leader for the ATWD team, this role will be leading a team of data scientists to ensure optimal development of data related products and delivery of data informed insights.

To achieve this, the ideal candidate will have:

- Proven experience in statistics and/or data science, ideally as a Lead Data Scientist or Principal Data Scientist, Lead Statistician or similar. Alternatively, similar experience conducting statistics-based research and data translation within an academic or tertiary institution under a different role such as Senior Research Fellow.
- A strong understanding, and demonstration of application in statistical methodologies and modelling practices such as: descriptive, inferential and bayesian statistics; regression, time series, multivariate and structural equation modelling, predictive analysis; and non-parametric methods.
- Experience working on large and complex data sets, in experimental design and research methodologies and associated statistical techniques. Experience with causal inference would be well regarded.
- Professional communication skills with practical experience delivering end-to-end research projects, advising on measurement approaches and operations practices related to statistical modelling.

- The successful candidate will have experience working with a variety of statistical analytics programs (for example R, SPSS, SAS, Stata, MATLAB, MPlus, Minitab, JMP, or similar), and/or programming skills (Python, SQL or equivalent), that they have utilised over their career for statistical analysis.
- Confidence and experience in working in cloud-based environments (i.e. AWS, GCP, Azure), would be advantageous.
- Keen understanding of how best to navigate stakeholder concerns and feedback, effectively influencing senior stakeholders in a managerial or team leadership role.

## About AITSL

AITSL is a Commonwealth company and not-for-profit based in Melbourne. We are funded by the Australian Government. The Australian Government is the sole member of the company, represented by the Minister for Education.

As a national body, AITSL was established to promote excellence in the profession of teaching and school leadership. We work with the education community to improve student learning in 3 main areas of focus:

- **Initial teacher education:** We provide support, resources and tools to help ensure that every pre-service teacher is classroom ready upon graduation.
- **Quality teaching:** We help teachers be the best they can be, and provide tools and resources to maximise their impact on student learning.
- **Leadership:** We help school leaders become highly-effective by giving them the tools, resources, policies and practices needed to succeed in their important role.

We are governed by a constitution and an independent Board of Directors who bring diverse professional experiences and expertise in educational practice, and research to the work of the company. Visit: [www.aitsl.edu.au](http://www.aitsl.edu.au) for more information about AITSL.



Up for the challenge



Embrace change



Working together



Being respectful

***AITSL is an equal opportunity employer and is committed to building a culturally diverse organisation. We strongly welcome and encourage interest from Aboriginal and Torres Strait Islander peoples and people from culturally diverse backgrounds. We also strongly welcome and encourage people with disabilities to apply for roles with AITSL.***