

Project Title:**Addressing Skill Shortage Crisis in Australia: A Comparative Analysis of Domestic and Overseas Student Contributions towards the Crisis****Introduction:**

Australia is currently grappling with significant skill shortages across various sectors including health, hospitality, IT, and architecture. This raises questions about the enrollment trends in relevant courses nationwide and the contributions of both domestic and international students in alleviating this crisis.

Motivation:

As a tech, sports and geopolitics enthusiast, I always had curiosity to understand the reasons to learn a new technology, the reasons behind the loss and wins in a game and the reason behind the conflicts among super power nations. And now as an overseas student it sparks my interest to understand how well the student mass is contributing towards current skill shortage crisis in Australia which gives a clarity on how far or close are students contributing towards this crisis.

Objectives to determine and analyze:

1. What is the distribution of domestic and international students enrolled in courses that address skill shortages in Australia?
2. Does the course completion among students correlate with demographic factors such as gender ratios?

Through a comprehensive analysis and visualization of the data, my goal is to gain a refined understanding of students' contribution towards skill shortage by their roles in higher education. By delving into enrollment patterns and demographic distributions, we aim to uncover areas where interventions are needed to enhance the effectiveness of the education system.

Data Sources:

The project utilizes the latest data sourced from [the Australian Government Department of Education](#), as of the most recent update on October 30th, 2023. This data serves as the primary foundation for conducting the comprehensive analysis and addressing the outlined objectives.

Nature of Data Type: All the extracted datatype are tabular in nature.

Data Attributes: The data is a mixture of nominal, categorical and ordinal

Data Timeline: 2019-2023

Data Source one: [Student enrollment in higher education in Australia](#)

The URL link embedded above (Data Source one) gives data on enrollment which will further help to understand the nature of enrollment and preferences of domestic and overseas students.

Data Source two: [Student course completion data in higher education](#)

Data Source Three: [Completion rate of domestic and overseas students.](#)

Data Source Four: [Attrition and success rate of all students](#)

The URL link embedded above (Data Source two, three and four) gives course completion rate of domestic and overseas student which will help to understand how many students have achieved the degree in their respective field

Data Source Five: [Overseas student demography \(tabular data\)](#)

The URL link embedded above (Data Source five) will help the proposal by providing data on overseas student and their demography of origin and where they are currently studying which will help to investigate the distribution across various state.

Data Source Six: [Data on skill shortages](#)

The URL Link above gives data on and insights on skill shortage and it's fill rate which will further help us to understand the impacts of graduate students.

Resources:

1. <https://www.education.gov.au/>
2. [2022 Section 2 All students - Department of Education, Australian Government](#)
3. [2022 Section 14 Award course completions - Department of Education, Australian Government](#)
4. [Completion Rates of Higher Education Students - Cohort Analysis, 2005-2022 - Department of Education, Australian Government](#)
5. [2022 Section 15 Attrition, success and retention - Department of Education, Australian Government](#)
6. [Skills Shortage Quarterly – September 2023 | Jobs and Skills Australia](#)