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# Factors impacting long-term academic achievement for students with autism Evidence from Queensland administrative data

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### BACKGROUND

This study examined academic achievement trajectories for students with autism using historical Queensland administrative data

### **Research Aims**

- Identify distinct groups of academic trajectories
- Identify factors that support successful long-term academic achievement

#### METHOD



Data includes 2 cohorts of students, verified with autism through EAP, in Queensland state schools:

#### 2010 cohort: 1645 students

Year 1

2013 cohort: 2032 students

Year 1

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019



Latent growth mixture models and multilevel regression models were used to group similar academic achievement trajectories (into classes) and to investigate associated factors

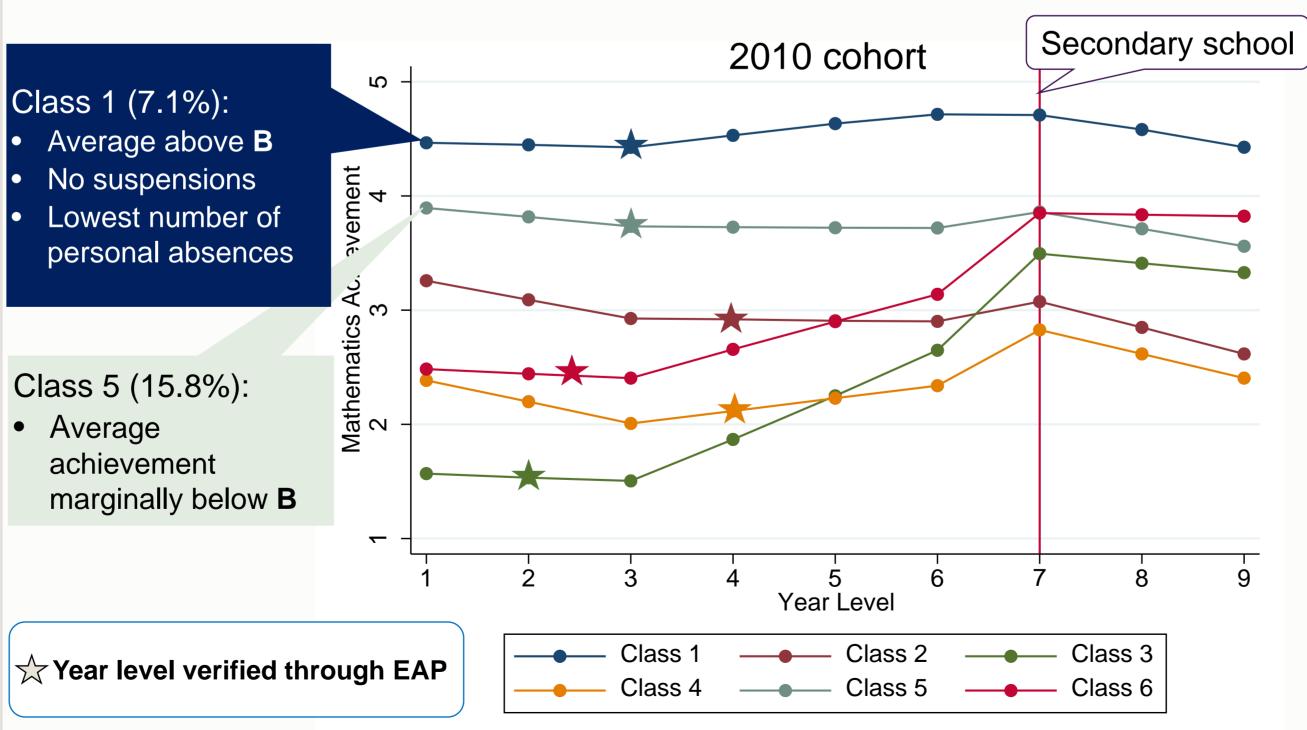
#### SUPPORTING FACTORS



#### MATHEMATICS ACHIEVEMENT TRAJECTORIES

- Average above **B**
- Lowest number of

• Average achievement marginally below **B** 



Academic achievement is measured on a 5-point scale: A=5, B=4, C=3, D=2, and E=1





- $\checkmark$  Early verification of autism through EAP by age 8
- ✓ Tailored learning supports
- ✓ Less than 6 personal absences per semester
- ✓ No suspensions
- Consistent EAP quartile rating across time





The trajectories demonstrate that students with autism have diverse academic achievement outcomes. Individualised educational adjustments are important for enabling academic success.

## IMPLICATIONS







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### FINDINGS

Students with long-term successful academic outcomes (class 1 and 5) come from diverse backgrounds

Students from **rural areas** could be as successful as their peers in other regions

Low personal absences and no suspensions are important for successful outcomes in school retention and improved academic achievement

**Identify support needs early** Students who achieved the greatest improvement in mathematics were verified with autism at a younger age

**Closely monitor students' behaviour and** academic performance following an EAP quartile change.



Changes to EAP quartile ratings impact subsequent academic achievement