

# QIE design scenarios

Program design	Data needed to capture information on outcomes for intervention/control groups	Outcome data availability: post-intervention only	Outcome data availability: pre- and post-intervention
<b>Single school/university</b> <ul style="list-style-type: none"> <li>selected students from a target population</li> </ul>	<b>Individual-level data</b> <ul style="list-style-type: none"> <li>for all students in that school/university in the target population</li> </ul>	<b>Typical methods</b> <ul style="list-style-type: none"> <li>Propensity score matching (PSM)</li> <li>Inverse probability of treatment weighting (IPTW)</li> <li>Regression adjustment (RA) designs</li> </ul>	<b>Typical methods</b> <ul style="list-style-type: none"> <li>First difference, fixed effects estimation</li> <li>Interrupted time series</li> <li>Regression discontinuity (RD)</li> <li>Models adjusting for the baseline differences between controls, e.g. difference-in-difference</li> </ul>
<b>Single school/university</b> <ul style="list-style-type: none"> <li>all students in a target population</li> </ul>	<b>Individual-level data</b> <ul style="list-style-type: none"> <li>for all students in the target population from the intervention and non-intervention school(s)/uni(s)</li> </ul>		
<b>Multiple schools/universities</b> <ul style="list-style-type: none"> <li>selected students from a target population</li> </ul>	(Preferred) <b>Individual-level data</b> <ul style="list-style-type: none"> <li>for all students in the target population from the intervention schools/universities</li> </ul> (OR) <b>School/uni-level data</b> <ul style="list-style-type: none"> <li>covering the intervention schools and non-intervention schools/universities</li> <li>information on the proportion of the students in the target population covered by the intervention in a particular school/university</li> </ul>		
<b>Multiple schools/universities</b> <ul style="list-style-type: none"> <li>all students in a target population</li> </ul>	(Preferred) <b>Individual-level data</b> <ul style="list-style-type: none"> <li>for all students in the target population from the intervention schools/unis and non-intervention schools/universities</li> </ul> (OR) <b>School/uni-level data</b> <ul style="list-style-type: none"> <li>covering the intervention and non-intervention schools/universities</li> <li>information on which schools/universities were covered by the intervention</li> </ul>		
		<b>Typical outcomes of interest</b> Interim & Final outcomes: <ul style="list-style-type: none"> <li><i>Pre-access</i>: progression, attendance, NAPLAN, Y12 completion, alternative credentials; applications, offers, enrolment</li> <li><i>Participation</i>: retention, progression, success, completion, post-graduate outcomes</li> </ul>	