

# Building alternative indicators for schooling

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Two fatal vulnerabilities of most education reforms are vagueness of outcomes and a neglect of wider political mobilisation to hold schools or systems to account



you can't measure  
what you don't know


# Project logic

A network diagram with several nodes connected by lines. The nodes are colored blue, yellow, and green. The lines are thin and brown. The diagram is set against a white background with a subtle texture.

- A normative purpose(s) of education
- Translation into desirable student outcomes
- Development of a theory of action to deliver on outcomes
- Implement of programs
- Evaluate (and revision) of programs

***If you claim it, then you need to be able to evidence it. If you cannot, don't claim it.***

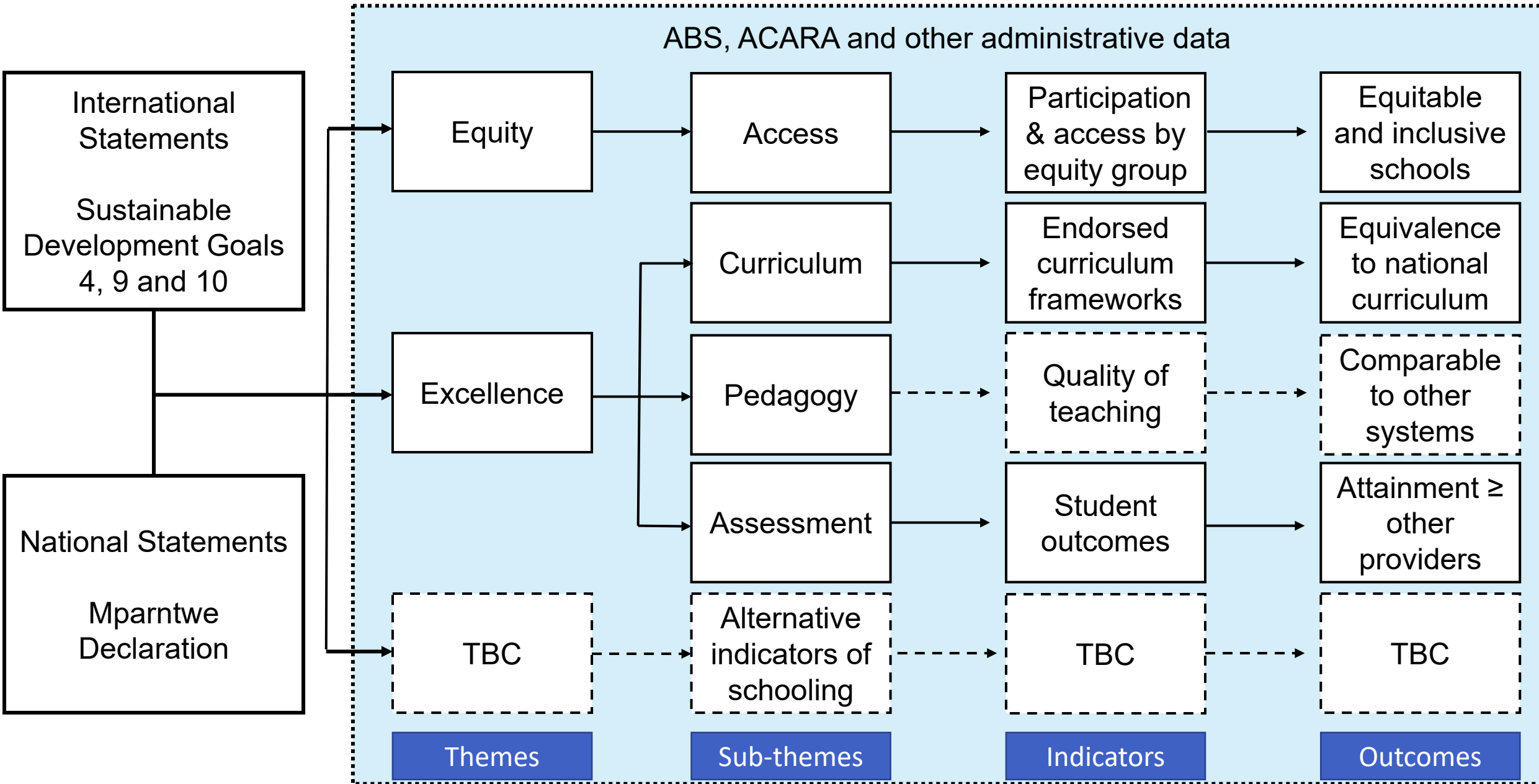


A close-up photograph of a hand holding a set of keys. The hand is positioned in the lower-left quadrant of the frame, with the keys hanging from the fingers. The background is blurred, showing what appears to be an indoor setting with warm lighting. The image is partially enclosed by a white circular graphic element on the right side.

# Three key education policy questions

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- Do you get the outcomes you claim?
- Is there stakeholder buy-in?
- Can it scale?



# Natural experiments

## Steiner

- 47 schools (+ affiliates)
- 58% outside cities
- 1062 ICSEA, 4.5% ATSI, 15.2% LBOTE
- $.10\sigma$  above national avg

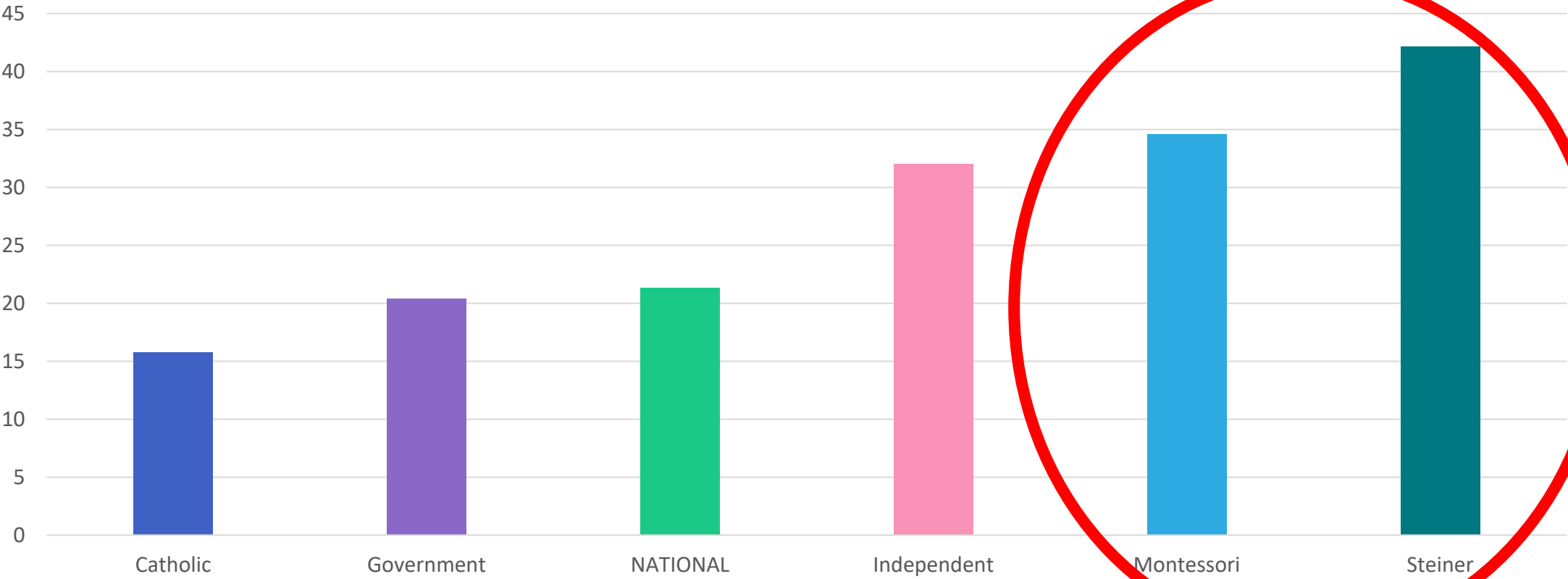


## Montessori

- 39 schools (+ affiliates)
- 90% in major cities
- 1121 ICSEA, 0.9% ATSI, 26% LBOTE
- $.20\sigma$  above national avg

# Stakeholder buy-in

*Fig. 2.* Percentage of growth in enrolment by sector, 2008-2021





# Distinctions



In contrast, the BAIS project is about working **with schools** to evidence and demonstrate their impact.

New Metrics for Success is an opportunity for innovative school leaders to join with academic experts and international trailblazers to reimagine and influence schooling in Australia – to move away from the ‘grammar of schooling’ that continues to lock our schools into many of the distinctive features of the 20th century version of education.

Australian schooling is ready for a paradigm shift and the development of new metrics to assess, credential and measure student and school success. Young people must now be educated and assessed in new ways so they are prepared for a very different future.

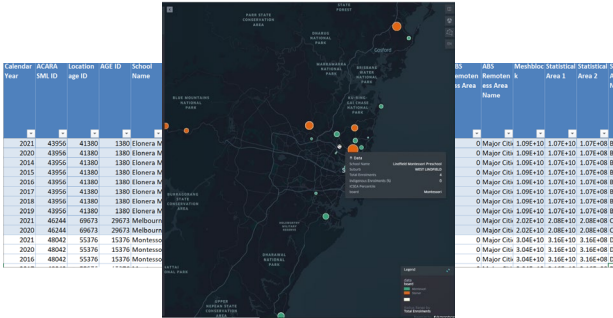
In this research-practice partnership, schools work with experts at the Assessment Research Centre to access University technology to support the creation and validation of new metrics.

A wooden board with a grid of colorful multiplication flashcards. The cards are arranged in rows and columns, with each card displaying a multiplication problem. The colors of the cards correspond to the first number in the multiplication problem: red for 1, purple for 2, blue for 3, yellow for 4, dark blue for 5, green for 6, light green for 7, and orange for 8. The problems range from 1x1 to 8x10. The text "Building alternative indicators for schooling" is overlaid in white on the center of the board.

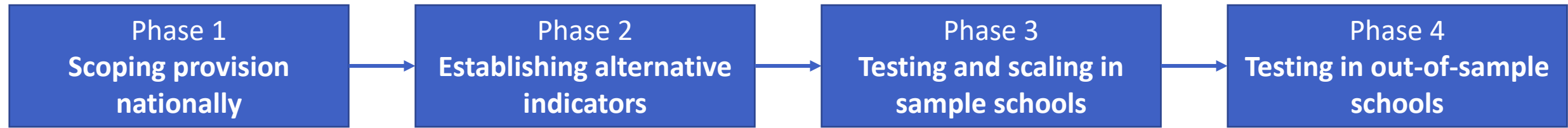
Building alternative  
indicators for schooling



# The project



Category	Indicator	Source	Evidence needed	Data generation / refined method	Strength of data
ACADEMIC	NAT8 outcomes	Literature	Student / school data	ANZQA / School level	National comparative
	HSC post-examination	Literature	Student / school data	ANZQA / School level	National comparative
	Annual Achievement	Literature	Student / school data	School level reporting	School level data
COMMUNITY	Education disadvantage	Literature	Indices for communities	ABS data (SA2 or SA1)	National comparative
	Participation / culture	Focus group / CI	Participation in events	School level data	School level data
NON-ACADEMIC	Subject choices	Focus group / CI	School level data	School level records	State comparative
	Comprehensiveness	Focus group / CI	Non-academic courses	School level records	State/Nat comparative
	Physical space	Focus group / CI	Photographic	Photos by researcher	Nat/Not comparative
	Facilities	Focus group / CI	Burial analysis	Site map from school	Nat/Not comparative
	Collaborative cooperative	Focus group / CI	TRC scale	Self-report questionnaire	Not / Not comparative
	Confidence / autonomy	Focus group / CI	TRC scale	Self-report questionnaire	Not / Not comparative
	Creativity	Focus group / CI	TRC scale	Creative task	Not / Not comparative
	Resilience	Focus group / CI	TRC scale	Self-report questionnaire	Not / Not comparative
	Motivation	Focus group / CI	TRC scale	Self-report questionnaire	Not / Not comparative
	Attendance / engagement	Focus group / CI	TRC scale	Self-report questionnaire	Not / Not comparative
Post-school destination	Post-school destination	Focus group / CI	PSD data	School level records	National comparative
	Engagement with nature	Focus group / CI	Participation (camp etc)	School level records	Nat/Not comparative
	Achievement data	Focus group / CI	Achievement data	School level records	Nat/Not comparative
Well-being / Interpersonal	Attendance	Focus group / CI & L&L	School / by group data	School level data	National comparative
	Agency / participation	Focus group / CI	TRC scale	Self-report questionnaire	Nat/Not comparative
	Relationships (Staff-Student)	Focus group / CI	TRC scale	Self-report questionnaire	Nat/Not comparative
	Relationships (Student-Student)	Focus group / CI	TRC scale	Self-report questionnaire	Nat/Not comparative
	Relationships (Staff-Staff)	Focus group / CI	TRC scale	Self-report questionnaire	Nat/Not comparative
	Level of learning	Focus group / CI	TRC scale	Self-report questionnaire	Nat / Not comparative
TEACHING	Quality of instruction	Literature	Quality Teaching Model	Pedagogical audit	Comparative
	Quality of curriculum	Focus group / CI	Quality of curriculum	Curriculum audit	Comparative
	Quality of assessment	Focus group / CI	Quality of assessment	Major project audit	Comparative
SCHOOL	Leadership	Focus group / CI & L&L	School-level data	School level data	National comparative
	Staff to student ratio	Focus group / CI & L&L	School-level data	ANZQA / school level	National comparative
	Accreditation level	Literature	School-level data	School-level data	State/Nat comparative



**Steiner 2021**  
The curators of contemporary education

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**Montessori in Australian schools**

Charting a path  
Dr Felice Pagan-Brown  
Lizze Reed

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	Accreditation level	Literature	School-level data	School-level data	State/Nat comparative

# Data sources

## Steiner

- 24 principal interviews
- 5 educator focus groups
- 2 community focus groups
- 1 student focus group



## Montessori

- 20 principal interviews
- 4 educator focus groups
- 3 community focus groups
- 1 student focus group

Category	Indicator	Source	Evidence needed	Data generation / retrieval method	Strength of data
<b>ACADEMIC</b>					
Academic achievement	- NAPLAN outcomes	- Literature	- Student / school data	- ACARA / School-level	- National comparative
	- HSC (exit) examination	- Literature	- Student / school data	- ACARA / School-level	- National comparative
	- Annual Achievement	- Focus group [E]	- Student / school data	- School-level reporting	- School level data
<b>COMMUNITY</b>					
Community	- Education dis/advantage	- Literature	- Indices for communities	- ABS data (SA2 or SA1)	- National comparative
	- Participation / volunteer	- Focus group [E, C]	- Participation in events	- School-level data	- School level data
	- Parental occupation	- Focus group [E]	- Enrolment data	- School-level data	- National comparative
<b>NON-ACADEMIC</b>					
(Extra-)Curricular	- Subject choices	- Focus group [E]	- School-level data	- School-level records	- State comparative
	- Comprehensiveness	- Focus group [E]	- Non-academic courses	- School-level records	- State/Nat comparative
Environment (school)	- Physical space	- Focus group [E, S]	- Photographic	- Photos by researcher	- Novel*
	- Facilities	- Focus group [E, S, C]	- Building analysis	- Site map from school	- Novel*
Personal attributes	- Collaborate /cooperate	- Focus group [E, S, C]	- TBC scale	- Self-report questionnaire	-
	- Confidence / articulate	- Focus group [E, C]	- TBC scale	- Self-report questionnaire	-
	- Creativity	- Focus group [E, S, C]	- PISA (2022) scale?	- Creative task	- Nat / Int comparative
	- Hobbies	- Focus group [E]	- TBC scale	- Self-report questionnaire	-
	- Motivation	- Focus group [E, S, C]	- TBC scale	- Self-report questionnaire	-
	- Persistence / Cog fatigue	- Focus group [E, S, C]	- TBC scale	- Self-report questionnaire	-
Post-school destination	- Post-school destination	- Focus group & Lit	- PSD data	- School-level records	- Potential comparative
Outdoor education	- Engagement with nature	- Focus group [E, S, C]	- Participation (camp etc)	- School-level records	- Novel*
	- Achievement data	- Focus group [E, S, C]	- Achievement data	- School-level records	- Novel*
	- Life skills	- Focus groups [E]	- Achievement data	- School-level records	- Novel*
Well-being / Interpersonal	- Attendance	- Focus group [E] & Lit	- School (by grade) data	- School-level data	- National comparative
	- Anxiety	- Focus group [E]	- TBC scale	- Self-report questionnaire	-
	- Buoyancy [resilience]	- Focus group [E, S, C]	- TBC scale	- Self-report questionnaire	-
	- Relationships [Stud-Stud]	- Focus group [E, S]	- TBC scale	- Self-report questionnaire	-
	- Relationships [Stud-Tch]	- Focus group [E]	- TBC scale	- Self-report questionnaire	-
	- Sense of belonging	- Focus group [E, S]	- PISA (2018) scale	- Self-report questionnaire	- Nat / Int comparative
	- Self-regulation / mgmt	- Focus group [E, S]	- TBC scale	- Self-report questionnaire	-
<b>INSTRUCTION</b>					
Quality teaching	- Quality of instruction	- Literature	- Quality Teaching Model	- Pedagogical audit	- Comparative
Curriculum (main lessons)	- Quality of curriculum	- Focus group [E]	- Quality of curriculum	- Curriculum audit	- Comparative
Assessment (snr project)	- Quality of assessment	- Focus group [E]	- Quality of assessment	- Major project audit	- Comparative
<b>SCHOOL</b>					
Professional learning	- Hrs of PL (or content)	- Focus group [C] & Lit	- School-level data	- School-level data	- National comparative
Staff	- Staff to student ratio	- Focus group [E, S, C]	- School-level data	- ACARA / school-level	- National comparative
	- Accreditation level	- Literature	- School-level data	- School-level data	- State/Nat comparative

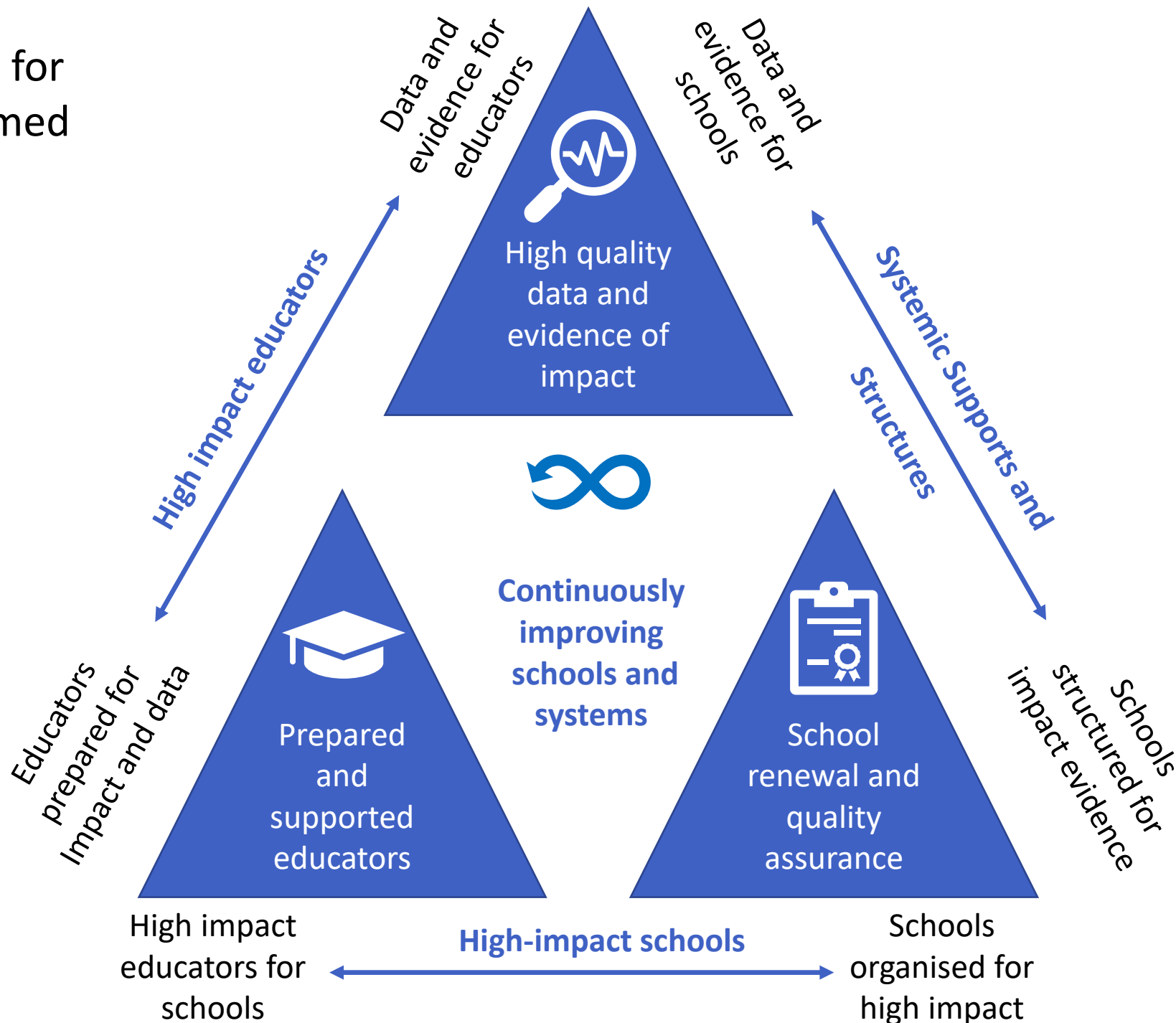


Evidence informed practice

A model for schools



**Fig. 4.** A model for evidence informed schooling





Thank you