# FISO 2.0 system measures

The FISO 2.0 system measures provide a reliable set of evidence-based measures for schools to use when completing the improvement cycle. Schools can use the measures to evaluate and diagnose their progress, prioritise and set goals for improvement, develop and plan for implementation, and monitor progress.

**Selecting the system measures**

**These measures represent the Department’s best evidence on what matters most to improving student outcomes**

The measures have been identified from Departmental analysis of data from Victorian government schools. Measures are selected by their largest impact on, and correlation to, positive learning and wellbeing outcomes for Victorian government school students.

The measures are also supported by Australian and international academic research.

These measures are a useful starting point for school strategic and annual planning and may be adapted to your school’s context.

**Principles for selecting the system measures**

### The following principles were used for the selection of FISO 2.0 system measures:

* A proven analytical or research evidence base to improving student learning and/or wellbeing outcomes
* Sufficient coverage at the school level so the measure covers most school and students
* Sufficient variation between schools and over time. This indicates the measure is not stable and can change in response to practice
* Where possible, at least three years of trend data at the school level

**The Department is committed to improving our evidence base over time**

In some cases, our work has revealed gaps in the Department’s measurement framework. The Department is committed to improving our evidence base and updating the system measures over time. Over the coming years, schools can expect some changes to data collections to fill these evidence gaps.

By continually improving our evidence base, we can continue to collectively learn how to further enhance learning and wellbeing outcomes for students.

**The FISO 2.0 system measures**

**The evidence-based system measures are aligned to the FISO 2.0 outcomes of learning and wellbeing**

Additional system measures are mapped against the five core elements, which together realise the goals of excellence and equity through developing the learning and wellbeing of every student.

In some instances, measures may relate to two or more core elements. This reflects the many interactions in the model and the complexities of school improvement. For simplicity, each measure has been assigned to one core element in the model.

Figure 1 below outlines the FISO 2.0 system measures.

**Figure 1: FISO 2.0 system measures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **FISO 2.0 Outcomes** | | | | | | |
| **Learning**  Benchmark growth (NAPLAN)  English online  Senior secondary completion rate | | **Wellbeing**  Resilience (AtoSS)  School connectedness (AtoSS)  Subjective physical health (AtoSS)  Emotional awareness and regulation (AtoSS)  Strengths and Difficulties Questionnaire (SEHQ, prep only) | | | | |
| **FISO 2.0 Core elements** | | | | | | |
| **Leadership**  Instructional leadership (SSS)  Trust in colleagues (SSS)  Managing bullying (AtoSS) | **Teaching and learning**  TJ growth (CASES)  Collective efficacy (SSS)  Academic emphasis (SSS)  Guaranteed and viable curriculum (secondary) (SSS)  Stimulated learning (AtoSS) | | **Assessment**  Monitoring effectiveness of using data (SSS)  Moderation of student assessment (SSS)  Understand formative assessment (SSS)  Use of student feedback to inform teaching practice (SSS) | **Engagement**  Attitudes to attendance (AtoSS)  Proportion of students with less than 20 absent days (CASES)  Sense of confidence (AtoSS)  Student voice and agency (AtoSS) | **Support and resources**  Advocate at school (AtoSS)  Experience of bullying (AtoSS)  Respect for diversity (AtoSS) |

**Data sources and further information**

AtoSS: Attitudes to School Survey

CASES21: Computerised Administrative System Environment in Schools 21. Where data is sourced via CASE21, schools typically access this data through [Panorama](https://edugate.eduweb.vic.gov.au/edrms/keyprocess/TEB/panorama/Pages/panorama.aspx), [School Information Portal](https://schoolportal.eduweb.vic.gov.au/Pages/default.aspx), local databases or third party software.

SEHQ: School Entrant Health Questionnaire

SSS: School Staff Survey

## Strength of evidence

The strength of evidence for each measure differs. System measures are assessed according to the following categories. See figure 2 below for evidence strength descriptions.

**Figure 2: Evidence strength description**

| Evidence strength | Description |
| --- | --- |
| Strong | Measure has a strong relationship to improved learning and/or wellbeing outcomes in Victorian government schools and is well supported by academic research |
| Good | Measure has a good relationship to improved learning and/or wellbeing outcomes in Victorian government schools and is well supported by academic research |
| Fair | Measure has a moderate relationship to improved learning and/or wellbeing outcomes in Victorian government schools and is broadly aligned with academic research. Evidence base requires improvement over time. |

## Evidence summary and strength for each system measure

Each system measure is supported by a summary of evidence and an evidence strength rating in the tables below, see figure 3:

**Figure 3: Evidence summary for the FISO 2.0 outcomes system measures**

| **Outcome** | Measure | Evidence | Evidence strength |
| --- | --- | --- | --- |
| Learning | Benchmark Growth (NAPLAN) | Benchmark growth measures the growth in learning between two NAPLAN tests by considering the student's starting point against fixed benchmarks of expected growth. Benchmark Growth allows for significant improvements in NAPLAN learning gain to be reflected at a system, school, and individual student level. | Strong |
| Learning | English Online Interview | The English Online Interview (EOI) assesses the English skills of students between Foundation and Year 2. It is mandatory for all Prep students to be assessed during Term 1 each year.  DET analysis shows there is a strong and positive correlation between the Prep EOI achievement (Reading) and the Year 3 NAPLAN achievement (Reading). | Strong |
| Learning | Senior secondary completion rate | Young people who do not complete Year 12 or equivalent qualifications are at greater risk of poor economic, social, and health outcomes. These risks are associated with a range of personal and social costs – including reduced lifetime earnings, increased reliance on government welfare and health services, and increased public expenditure on criminal justice (Lamb & Huo, 2017). | Strong |
| Wellbeing | Resilience (AtoSS) | Resilience includes the ability to bounce back or recover from stress, to adapt to demanding circumstances and to function above the norm in spite of pressure or adversity.  Resilience is a key wellbeing indicator and is also predictive of a student’s academic performance. Enablers of high levels of resilience include ‘perceived good academic performance’ and ‘having a trusted adult.’ Depressive symptoms and experience of bullying are risk factors for low resilience.  Students who reported low levels of resilience were more likely to be in the bottom bands of achievement in NAPLAN Reading and Numeracy.  Similarly, students with low levels of resilience were more likely to be ‘below expected level’ in teacher judgements, after controlling for student characteristics and prior performance. The impact was larger for Number and Algebra than Reading and Viewing across all year level groups. This was observed for primary and secondary aged students, though the effect size is larger for secondary aged students. | Strong |
| Wellbeing | School connectedness (AtoSS) | Sense of connectedness is a key wellbeing indicator, which describes students’ connection to their school.  Students’ sense of connectedness is correlated with performance in NAPLAN. This is stronger for secondary school-aged students, where student perceptions of sense of connectedness are more differentiated.  Sense of connectedness is also one of six AtoSS survey factors that explains much of the common variance amongst students. This means it is a robust and discrete measure. | Strong |
| Wellbeing | Subjective physical health (AtoSS) | Physical health refers to the state of your physical body and how healthy it is. This is important as research shows that physical health relates directly to wellbeing (Kern, Benson, Steinberg & Steinberg, 2016; Wolfson & Carskadon, 1998). With this measure first collected in 2021, Departmental analysis on the impact of subjective physical health and learning is not yet available. | Good |
| Wellbeing | Emotional awareness and regulation (AtoSS) | Emotional awareness and regulation capture students’ perception of how well they feel they can recognise and manage their emotions. Early Departmental analysis of this measure, first collected in 2020, reveals that student perceptions of their emotional awareness and regulation are highly correlated to factors that impact learning, including perseverance, sense of confidence and sense of connectedness. | Strong |
| Wellbeing | Strengths and Difficulties Questionnaire (SEHQ, prep only) | The Strengths and Difficulties Questionnaire is a brief behavioural screening questionnaire within the School Entrant Health Questionnaire that includes questions on 25 psychological attributes, including emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial.  The School Entrant Health Questionnaire relies on parent perceptions of their children. As such, concern can sometimes be overstated or understated. | Good |

Each system measure is supported by a summary of evidence and an evidence strength rating. See figure 4 below for alignment with the core elements:

**Figure 4: Evidence summary for the FISO 2.0 core element system measures**

| **Core element** | Measure | Evidence | Evidence strength |
| --- | --- | --- | --- |
| Leadership | Instructional leadership (SSS) | Australian and international research reveals that leadership has a significant impact on student outcomes after controlling for student characteristics.  With three years of data now available for the Instructional leadership factor, it is now included in the Differentiated School Performance Model; the model that determines performance groups in the School Performance Report. | Strong |
| Leadership | Managing bullying (AtoSS) | Managing bullying measures the students’ perception that the school handles bullying and harassment appropriately.  Managing bullying is a key indicator for building a positive school climate for learning and wellbeing.  DET analysis shows student endorsement of managing bullying is significant and has a positive correlation to their performance in NAPLAN.  At the school level, there is a negative relationship between student endorsement of management of bullying and experience of bullying. This means schools with larger proportions of students reporting experience of bullying are more likely to have lower endorsement of management of bullying. | Strong |
| Leadership | Trust in colleagues (SSS) | A strategic evaluation of DET’s school reform agenda showed that schools with positive endorsement of Trust in colleagues had a positive relationship to a school’s performance in NAPLAN. | Good |
| Teaching and Learning | Collective efficacy (SSS) | Collective efficacy describes the degree to which school staff believe they have the necessary skills, expertise and resources to successfully educate students.  Collective efficacy is a significant predictive factor for NAPLAN performance and school improvement (DET analysis, Strategic evaluation of school reform). | Strong |
| Teaching and learning | TJ growth (CASES) | Teacher judgement data has a reasonable alignment with benchmark growth. It is less granular in terms of performance increments, however, collected more frequently from broader teacher observations. | Good |
| Teaching and learning | Stimulated learning (AtoSS) | Stimulated learning describes the degree to which teachers are making students interested in learning. DET analysis shows stimulated learning is significantly correlated with NAPLAN performance. | Strong |
| Teaching and learning | Academic emphasis – (SSS) | Academic emphasis describes the degree to which emphasis is placed on the importance of academic success and school norms support learning.  A strategic evaluation of DET’s school reform showed a very strong relationship between staffs’ perceptions of Academic emphasis to NAPLAN performance. | Strong |
| Teaching and learning | Guaranteed and viable curriculum (secondary schools only) – (SSS) | Guaranteed and viable curriculum describes the degree to which the curriculum is coherent across year levels and is delivered adequately in the time allotted.  A strategic evaluation of DET’s school reform showed moderate correlation with overall school performance. Correlation is higher for secondary schools than primary schools. | Good |
| **Engagement** | Attitudes to attendance (AtoSS) | Attitudes to attendance describes students’ attitude towards absenteeism. DET analysis from Victorian Government schools shows attitudes to attendance is highly predictive of a student’s attendance patterns and significantly correlated to NAPLAN performance. | Strong |
| **Engagement** | Proportion of students with less than 20 absent days (Panorama) | Regular school attendance is associated with the development of social skills including making friends, teamwork, communication skills and self-esteem, as well as many abilities necessary to become productive and responsible adults. (Australian Institute of Health and Welfare, 2012; Keating & Hertzman, 1999; Zubrick, et al., 2006).  DET analysis found students with high absence have poorer academic performance in NAPLAN and teacher judgements. Absence rates are also a very strong predictor for students disengaging from education. | Strong |
| **Engagement** | Sense of confidence (AtoSS) | Sense of confidence describes students’ degree of confidence in their ability to learn. Sense of confidence is most aligned with the Victorian Student Health and Wellbeing Survey factor Perceived good academic performance, which DET regression analysis revealed is a statistically significant predictor for high levels of resilience. | Strong |
| **Engagement** | Student voice and agency (AtoSS) | Student voice and agency describes the degree to which students perceive they are heard and have a say at the school.  Australian and international research reveals that Student voice and agency have a positive impact on engagement, purpose, and academic motivation, which contribute to improved student learning outcomes. | Good; minimal evidence from DET data |
| **Support and resources** | Advocate at school (AtoSS) | Having a trusted adult or someone to turn to for advice in adolescence makes young people more resilient, dramatically reducing the impact of adverse life experiences on wellbeing (Bellis, et al., 2017). Advocate at school is most aligned with the VSHWS factor Trusted adult, which DET regression analysis using Data from Victorian Government schools showed is a statistically significant predictor for high levels of resilience.  Advocate at school is also one of six AtoSS survey factors that explains much of the common variance amongst students (Cain and Hattie, 2019). This means it is a robust and discrete measure. | Strong |
| **Support and resources** | Experience of bullying (AtoSS) | DET analysis shows students who experience bullying also have poorer NAPLAN performance. Meta-analyses of international research have shown that experiences of victimisation due to bullying predict higher levels of psychological distress, including the onset of mental health concerns and suicidal ideation, as well as higher rates of school absenteeism and reduced achievement on standardised testing.  Experience of bullying is also one of six AtoSS survey factors that explains much of the common variance amongst students (Cain and Hattie, 2019). This means it is a robust and discrete measure. | Strong |
| **Support and resources** | Respect for Diversity (AtoSS) | Respect for diversity describes the degree to which students perceive that people are treated fairly and diversity is respected at their school.  DET analysis shows that after controlling for school disadvantage level, student endorsement of respect for diversity is correlated with NAPLAN Reading performance for Year 9 students. There is a weaker relationship with Year 5 Reading, which is in part explained by much higher levels of endorsement amongst primary school students. | Good |
| **Assessment** | Monitoring effectiveness of using data (SSS) | A strategic evaluation of DET’s school reform found that schools with high endorsement of ‘Monitoring effectiveness of using data’ had a moderate correlation to overall school performance group classification in the Differentiated School Performance Model. | Fair |
| **Assessment** | Moderation of student assessment (SSS) | A strategic evaluation of DET’s school reform found that schools with high endorsement of ‘Moderation of student assessment’ had a moderate correlation to overall school performance group classification in the Differentiated School Performance Model. | Fair |
| **Assessment** | Understand formative assessment  (SSS) | A strategic evaluation of DET’s school reform found that schools with high endorsement of ‘Understand formative assessment’ had a moderate correlation to overall school performance group classification in the Differentiated School Performance Model. | Fair |
| Assessment | Use of student feedback to inform teaching practice (SSS) | The Strategic evaluation of school reform found that schools with high endorsement of ‘Use of student feedback to inform teaching practice’ had a moderate correlation to overall school performance group classification in the Differentiated School Performance Model. | Fair |

© State of Victoria (Department of Education and Training) 2021. Except where otherwise [noted,](https://www.education.vic.gov.au/Pages/copyright.aspx) material in this document is provided under a [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/) Please check the full [copyright notice](https://www.education.vic.gov.au/Pages/copyright.aspx)