Schools as Learning Organisations

Contents

Foreword

The achievement of better outcomes for students is a core objective of every school and school system.

The outcomes that schools and systems seek to improve are not limited to academic outcomes; they include a broad range of intentions, including better student engagement, greater enjoyment of learning and improved student health and wellbeing.

Improved outcomes depend on improved practices in classrooms and schools.

But the big questions are: What are improved practices? and How do you get them happening?

One approach, adopted by some school systems, is to by-pass the question of what improved classroom and school practices look like and to attempt instead to 'drive' improvement through a focus on outcomes.

More specifically, it is assumed that practices in schools will not change unless there is an incentive to change, so systems of rewards and sanctions are introduced.

These include holding teachers and leaders personally accountable for improved outcomes; linking performance pay to test results; providing financial rewards for school improvement; and intervening when schools are not demonstrating adequate improvement – including by changing the school leadership and closing underperforming schools.

The threat of losing students is also sometimes seen as an effective incentive, leading some systems to ensure data are available to allow public comparisons of schools and freeing schools to function as autonomous competitors in the marketplace for students.

However, there is not much evidence that incentives of these kinds work in practice, and they often lead to unintended behaviours on the part of schools attempting to maximise outcomes.

This document is based on the alternative belief that schools have an *intrinsic* desire to improve outcomes for students and that improved practices and improved outcomes will be achieved through collaborative, systematic, school-wide efforts to *learn how to improve*.

In other words, the school functions as a learning community underpinned by a belief that, no matter how well or how poorly the school is performing, improvement is always possible.

At the heart of this approach is the concept of a continuous improvement cycle – a rigorous methodology for reviewing current school practices and outcomes; setting goals for improvement; designing and implementing school improvement strategies; monitoring changes in student outcomes; and reviewing and reflecting on the effectiveness of the school's improvement efforts.

Schools and their communities must develop new cultures of learning in order to improve.

Fullan *et al*[1]

This is not about 'revolutionary' change, but rather about 'evolutionary' change – starting from where you are, experimenting, adapting and learning by doing – with all changes based on evaluated evidence.

Collarbone[2]

For change to be successful and sustainable there has to be a compelling reason to change, a clear vision of where you want to be, a coherent plan for getting there… and a way of measuring and monitoring changes on an ongoing basis.

Collarbone[2]

The principal's new role: to lead the school's teachers in a process of learning to improve their teaching, while learning alongside them about what works and what doesn't.

Fullan[3]

1   Fullan, M, Cuttress, C & Kilcher, A (2005). Eight forces for leaders of change. National Staff Development Council, 26(4), 54-64.

2   Collarbone, P (2015). Leading change, changing leadership (Part 2). System change moving to the next level of   performance – incorporating two case studies. CSE Occasional Paper 142, pp 2-3.

3   Fullan, M (2015). Coherence: putting your inner drive into overdrive: Australia Workshop. Motion Leadership, p9.

Introduction

At the centre of every educator's professional work is a commitment to ongoing student growth and development – a belief that every student is capable of successful learning if they can be engaged, motivated to make the required effort and provided with well-targeted teaching and learning opportunities. This belief in the possibility of continual improvement is sometimes referred to as a 'growth' mindset and can be contrasted with the more pessimistic 'fixed' belief that there are natural limits to many students' capacities for learning and eventual high achievement.

The concept of a growth mindset also can be applied to the work of school improvement. In this context, a 'growth' mindset is a belief in the ability of a school to make continual improvements in how well it is meeting the needs of the students it serves. This belief in the possibility of making ongoing improvements to school practices and student outcomes can be contrasted with a 'fixed' belief that there are natural limits to what teachers and schools can do and to how well students in some schools can be expected to perform – especially if they are from less advantaged backgrounds.

Learning how to improve

Continual school improvement depends on continual learning about how to improve. The key to school improvement lies less in the implementation of silver-bullet solutions and more in ongoing school-wide learning about how to improve on current practices. A plan for school improvement is a plan for collaborative investigation and learning, and usually involves a number of steps.

Knowing where you are as a school

A plan to improve depends first on a good understanding of existing school practices and outcomes – particularly current levels of student attainment. These are the starting points for any improvement effort and the baselines against which a school's improvement efforts are evaluated.

Specifying desired outcome improvements

Second, a school improvement plan specifies *what* improvements in outcomes a school wishes to see. Desired improvements may include, but are not limited to, improvements in student achievement, school attendance, post-school destinations and student attitudes and engagement. An improvement plan may include specific targets and timeframes for achieving these.

Designing and implementing an improvement strategy

Third, a plan specifies *how* improvements are to be achieved – that is, the strategy (or strategies) the school intends to use to improve on current school practices and thus improve student outcomes. The plan also identifies what will be required to implement the strategy; for example, changes in culture, staff professional development, staff deployment or physical resources required for effective implementation.

Measuring and monitoring improvements in outcomes

Fourth, a plan identifies how improvements in outcomes will be measured and confirmed. The questions asked here include: Was there a measurable improvement in the outcomes the school was trying to improve? What is the evidence?

Reflecting on what has been learnt

Finally, a school improvement plan includes a plan for reflecting on, and learning from, collaborative improvement efforts. The questions here include: What, if any, difficulties were encountered in implementing the planned improvement strategy? Did school practices change as intended? Was the strategy itself responsible for observed improvements in student outcomes? How sustainable are those improvements? And if there was no improvement, what lessons can be learnt?

A school improvement cycle

These five steps in designing, implementing and evaluating school improvement efforts can be thought of as elements of a potentially ongoing improvement cycle. When an improvement strategy is effective, it results in changed school practices and improved student outcomes and so establishes new starting points for future improvement efforts.
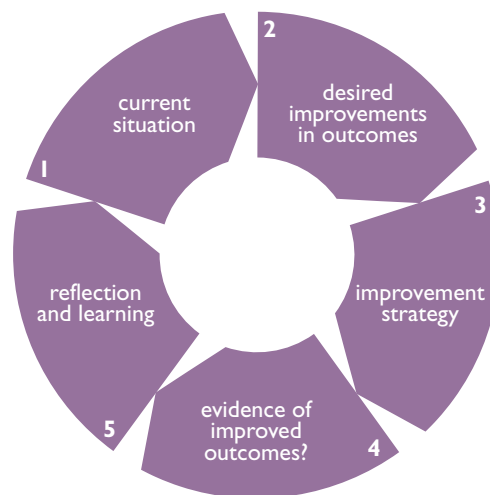
Importantly, a school improvement plan is more than a list of intended improvements in outcomes, such as:

- Improve Year 5 literacy and numeracy results
- Increase school attendance rates
- Improve Year 12 results
- Reduce behaviour problems
- Improve community perceptions of the school

A school improvement plan also must establish starting points for improvement (What are current Year 5 literacy and numeracy levels? What are current community perceptions of the school?); identify strategies for improvement; and specify how improvements in outcomes will be measured.

A school improvement plan also must be more than a list of actions a school intends to take, such as:

- Employ a literacy specialist
- Introduce a new health and wellbeing program
- Partner with a local industry
- Build a new performing arts centre
- Provide professional development in data analysis

A school improvement plan must provide a rationale for such initiatives, linking them to desired improvements in student outcomes and indicating how their effectiveness will be evaluated. In other words, a plan is incomplete if it does not address each step in a school improvement cycle in sequence.

A school improvement culture

A school improvement plan is not merely an ambitious goal set by the school leadership team – an exhortation to improve outcomes. Nor is it a to-do list for school leaders. Rather, a school improvement plan is an element of a deeper improvement culture in a school, underpinned by a set of shared beliefs, values, commitments and understandings. These include:

- a belief that continual improvement in a school's practices is possible, with implications for improved student learning and achievement;
- a shared commitment as a school community to an agenda of continual improvement;
- an understanding that improvement depends on learning as a school community how to improve; and
- an understanding that learning how to improve depends on the disciplined implementation and investigation of practical improvement efforts.

In this sense, a school improvement plan is an important part of the work of the school as a *learning community*. It is not only an intention to make meaningful improvements in day-to-day work, but also an opportunity to accumulate from practice professional knowledge about how to improve. For these reasons, a school improvement plan ideally is developed and evaluated in consultation with parents and the broader school community.

Developing a plan

The pages that follow describe in greater detail the five steps in a school improvement cycle. A complete school improvement plan is likely to address each of these steps in turn and provide information about:

- the context in which the school operates;
- current student outcomes and how they were measured;
- current school practices and how they were reviewed;
- the outcome improvements that the school is seeking;
- the school's intended improvement strategy (planned changes to practice);
- how improvements in outcomes will be measured; and
- plans for reviewing the success of the school's improvement strategy.

The following pages provide examples of questions a school might ask and issues a school might address in relation to each step in its school improvement cycle.

Knowing where you are as a school

School improvement is the process of changing school practices in ways that lead to better student outcomes.

The starting point in the development of a school improvement plan is to develop a good understanding of the current situation. This involves developing a good understanding of current *student outcomes* as well as a good understanding of current *school practices*. Both are important in establishing baselines for improvement. Changes in school practices that do not result in better student outcomes, and improvements in student outcomes that cannot be explained in terms of better school practices, do not necessarily indicate 'school improvement'.

At the start of a school improvement process, information about existing levels of student outcomes and prevailing school practices must be collected systematically and reliably. It is not possible to draw meaningful conclusions about improvements in outcomes or practices if this initial information is unreliable. Data need to be collected objectively and dispassionately and reflect the realities of the school's current performance – not somebody's intentions or beliefs about what is happening in the school. For this reason it is often useful to include in the data gathering process evidence from independent sources; for example, external measures of student performance or an independent review of the school's current practices. Baseline data are an essential part of the contextual information required for the evaluation of a school's improvement efforts.

Current student outcomes

The ultimate purpose of school improvement is to improve outcomes for students. The collection of baseline data on student outcomes will be driven by each school's priorities for improvement. For example, a school's priority could be to improve children's oral language skills in the first year of school; to increase the proportion of Year 3 children achieving national minimum standards in numeracy; to reduce unexplained absences in the middle years of school; to improve Year 12 results in English; or to increase the percentage of students making successful transitions from school to further education or work. Each of these priorities requires the collection of dependable baseline data that subsequently can be used to determine whether improvement has occurred.

The process for collecting baseline data will depend on the particular outcomes the school targets for improvement. Data may include records kept by the school, test and examination results, data gathered through parent surveys, and classroom assessments against student observation schedules. Meaningful conclusions about improvements in outcomes depend on valid and reliable data on starting points.

Because improvement occurs over time, it is essential that measures of outcomes can be compared over time. This is not a trivial issue. It is often not appropriate to use the same assessment instrument on different occasions, and it is usually not possible to compare directly raw scores on different instruments (for example, different reading tests given to Year 4 students at the beginning and end of the school year).

However, comparisons of performances on different tests *are* possible if those tests have been 'calibrated' on a common reporting scale. For example, The Progressive Achievement Tests (PAT) allow teachers to give different tests on different occasions and to measure changes in student performance over time. PAT tests can be used to compare the performances of different cohorts of students and also to monitor the progress of the same cohort of students annually from the early years into the middle years of school. The National Assessment Program – Literacy and Numeracy (NAPLAN) tests also are calibrated to allow comparisons of performance on different tests on different occasions.

Current school practices

School improvement is achieved not by working on outcomes directly, but by working on the school practices that result in better outcomes. At heart, school improvement is about changing school practices. It follows that successful school improvement depends on knowing which changes are most likely to lead to improved outcomes for students.

Much is known about the kinds of school practices that produce better student outcomes. The *National School Improvement Tool* (NSIT) identifies and describes a range of effective school-wide practices known to influence outcomes. These practices include developing a school-wide commitment to improvement; supporting teachers to collaborate around improved teaching and learning practices; using data to direct school and teacher interventions, monitor progress and evaluate effectiveness; creating a culture of high expectations; promoting effective pedagogical practices, including the use of assessments to monitor learning and provide feedback; and understanding and differentially addressing the learning and other needs of individual students.

The *National School Improvement Tool* provides a framework for gathering baseline data on school practices of these kinds. The NSIT describes different levels of practice (low, medium, high, outstanding) in nine areas or 'domains' of practice. It is used by schools as a basis for self-assessment and also by trained, external reviewers to provide an independent perspective on how a school is performing. When the NSIT is used on different occasions (for example, annually), it provides a basis for monitoring and reflecting on long-term improvements in practice.

Depending on the outcomes a school has prioritised for improvement, it may be desirable to monitor improvements in specific teaching practices. For example, if a school's priorities include improving reading levels in the early years of school, then it may be desirable to gather systematic information about how well evidence-based strategies for the teaching of reading are being implemented across the early years. Baseline data for this purpose may include direct observations and judgements of teaching practice.

Specifying desired outcome improvements

A school improvement plan specifies the improvements in student outcomes a school community wishes to see. This usually involves providing answers to the questions: Which student outcomes do we most want to improve? What level of improvement should we be aiming for? On what timeline? As a plan for improving student outcomes, a school improvement plan recognises the need to prioritise, to set realistic expectations, and to provide the time required for meaningful and sustainable improvement.

Underpinning every school improvement effort is a belief that, no matter how well a school is performing, there are always areas in which improvement is possible – areas in which student needs could be better met and outcomes could be further improved. A school improvement plan identifies these opportunities for improvement and is explicit about the outcome improvements the school wishes to achieve.

Prioritising outcomes

Schools typically are at different points in their improvement journeys and so have different priorities for improving outcomes. Some examples of outcome improvements that could be sought by a school include:

- increasing levels of school readiness among children in the Foundation Year of school, with a particular focus on communication, language and social development;

- reducing school-wide unexplained absences;

- reducing the proportion of Year 3 children not achieving the national minimum standard in reading;

- improving students' personal and social capabilities (including self-awareness, self-management, social awareness and social management);

- improving the school's Year 12 results;

- reducing the incidence of negative student behaviour (including by reducing levels of bullying);

- increasing participation rates in co-curricular activities of the school;

- increasing the number of students choosing to study advanced science, technology, engineering and mathematics (STEM) subjects in the senior secondary years;

- increasing the proportion of Year 12 graduates enrolling in Higher Education courses; and

- improving levels of student health and wellbeing.

Most school communities can identify a range of improvements that they would like to make in student outcomes. A school improvement plan must be realistic about the improvements that can be made over the course of a school year and identify a school's priorities – the outcomes on which the school's immediate improvement efforts will be focused.

It is also important in setting priorities to ensure that good measures of the selected outcomes are available. There is little point in setting goals for improvement if the school cannot establish whether improvement has occurred. This depends both on the availability of reliable starting point (baseline) data and subsequent measures that can be compared directly with these data.

Setting targets and timelines

As well as identifying the outcomes that they wish to improve, schools sometimes specify targets for improvement – that is, *how much* improvement they would like to see – often accompanied by timelines for achieving those improvements. Examples include:

- halving the number of Year 9 students performing below the national minimum standard in numeracy over the next three years;

- achieving a 10 per cent increase in the number of students choosing to study senior STEM subjects in the following school year;

- achieving a 50 per cent reduction in unexplained absences over the coming twelve months; and

- doubling the number of students achieving ATARs above 90 over the next two years.

In setting targets of these kinds, a balance needs to be struck between setting ambitious stretch challenges and being realistic about the levels of improvement that can be made. There is little value in setting targets that can be achieved without effort or in setting targets that are so ambitious that they are unachievable in practice.

Some guidance in determining ambitious but achievable targets will be provided by a good understanding of a school's current practices and outcomes. Evidence concerning recent trends and the success of the school's past improvement efforts also may be helpful. For example, it is unlikely (but maybe not impossible) that large improvements in outcomes will be made in twelve months if a school's improvement efforts over the previous five years resulted in only minor changes in outcomes.

Other guidance may be available from outcomes achieved in other schools, particularly similar schools operating in similar circumstances (that is, 'like schools'). By benchmarking itself against like schools, a school may be able to establish realistic expectations. For example, if some schools with similar student intakes are achieving higher literacy and numeracy results, better ATARs or lower absentee rates, then these performances may indicate what it is possible for the school to achieve as a minimum.

Still other guidance may be provided by the *improvements* that other schools have succeeded in making in student outcomes. A school's target and timeline for improvement may be more realistic if there is evidence that other schools have succeeded in making similar improvements on similar timelines.

Designing and implementing an improvement strategy

Once a school has decided the outcomes it wishes to improve, the next step is to decide how those improvements will be achieved. In general, better student outcomes are achieved through more effective, evidence-based school and classroom *practices*. A school improvement plan makes explicit the changes in practice a school intends to make.

The details of a school's improvement strategy will depend on which student outcomes it has prioritised and what it knows about current school practices. The *National School Improvement Tool* (NSIT) provides schools with a way of reflecting on their current practices, identifying areas in which improvements could be made, and monitoring improvements in practice over time. The NSIT (https://www.acer.edu.au/files/NSIT.pdf) invites schools to reflect on and to evaluate nine areas of current practice. These nine areas are described in detail in the NSIT and are summarised here as a guide to possible considerations in developing an improvement strategy.

Considerations in developing an improvement strategy

An explicit improvement agenda

Improvements in student outcomes are promoted by a shared, school-wide understanding of the improvements being sought. Part of a school's improvement strategy may be to ensure that desired improvements in student outcomes are clearly expressed and communicated across the school, including to parents, families and students. A related strategy may be to promote a strong and optimistic school-wide commitment to the improvement agenda and a shared belief that improvement is possible.

Analysis and discussion of data

Improvements in student outcomes are promoted by the effective use of data to establish starting points for action, to monitor progress over time and to evaluate the effectiveness of interventions and changes. Part of a school's improvement strategy may be to improve the quality of the data being collected and to promote the analysis and use of systematically collected data throughout the school. A related strategy may be to prioritise professional development to build teachers' and leaders' data literacy skills.

A culture that promotes learning

Improvements in student outcomes are promoted by a school ethos built around high expectations, positive and caring relationships and a deep belief that every student is capable of making excellent learning progress. Part of a school's improvement strategy may be to build stronger partnerships with parents and families to better meet the learning needs of every student. A related strategy may be to promote a sense of belonging and pride in the school as a safe, respectful, inclusive learning environment that values intellectual rigour.

Targeted use of school resources

Improvements in student outcomes are promoted by mobilising a school's physical and human resources (staff time, expertise, funds, facilities, materials) in ways that enhance the school's prioritised outcomes. Part of a school's improvement strategy may be to determine how its available resources can be applied more effectively to address student needs; for example, deploying staff in ways that make better use of their expertise or ensuring that school facilities and other infrastructure are used in a targeted manner to advance the school's improvement agenda.

An expert teaching team

Improvements in student outcomes are promoted by highly able teachers who work as a team and adopt shared responsibility for student learning and success. Part of a school's improvement strategy may be to build a school-wide culture focused on improving classroom teaching. This strategy may include mentoring and coaching; teachers collaboratively planning, delivering and reviewing the effectiveness of lessons; jointly analysing student work; identifying effective pedagogies; and learning from each other's practices.

Systematic curriculum delivery

Improvements in student outcomes are promoted by a coherent, sequenced plan for curriculum delivery and for monitoring learning across the year levels. Part of a school's improvement strategy may be to ensure 'vertical' alignment of the school's curriculum so that there is continuity and progression of learning across the years of school, strong alignment between the curriculum delivery plan, term and unit plans, classroom teaching and the regular assessment of student progress in relation to curriculum expectations.

Differentiated teaching and learning

Improvements in student outcomes are promoted by ensuring that the learning needs of individual students are recognised and addressed. Part of a school's improvement strategy may be to identify students requiring significant adjustments to their learning programs (for example, accelerated programs, special support) and individual learning plans. A related strategy may be to encourage and support teachers to monitor the progress of individuals, identify learning difficulties and tailor teaching to levels of student readiness and need.

Effective pedagogical practices

Improvements in student outcomes are promoted by highly effective classroom teaching. Part of a school's improvement strategy may be to encourage the use of more effective, research-based teaching practices in all classrooms to ensure that every student is engaged, challenged and learning successfully. A related strategy may be for school leaders to spend time working with teachers to improve their teaching practices, including modelling, evaluating and providing feedback on classroom teaching.

School-community partnerships

Improvements in student outcomes are promoted by partnerships that provide access to expertise, experience and/or resources not available within the school. Part of a school's improvement strategy may be to form a partnership with another education or training institution, local business or community organisation to better address specific student needs. This involves identifying appropriate partners to address existing needs and clarifying partner roles and responsibilities.

Measuring and monitoring improvements in outcomes

The fourth step in a school improvement cycle is to establish whether outcomes have improved. Conclusions about improvement require measures that can be compared over time and possibly across different instruments. Changes also must be large enough to indicate meaningful improvement rather than chance fluctuation. And conclusions about improvement can be made with more confidence when there is evidence of a trend in outcome measures over a number of years.

A school's improvement strategy is effective to the extent that it results in the intended improvements in student outcomes. Thus a core question for a school is, 'Have outcomes improved?' For some kinds of outcomes, this question may be answered relatively easily; for others, care may be needed to ensure that apparent changes in outcome measures reflect real improvements rather than differences in data collection processes or uncertainties of measurement. The measurement of change is crucial to the evaluation of a school's improvement strategy, but this process is not always straightforward and involves a number of technical considerations.

Comparable measures?

Conclusions about whether, and how much, improvement has occurred depend on the ability to make direct comparisons of data before and after the implementation of an improvement strategy. In some situations this is straightforward. For example, the percentage of students enrolling in STEM subjects or the percentage of students gaining admission to Higher Education courses usually can be compared directly from one year to the next. Other measures such as unexplained absences and reported incidents of poor student behaviour may need to be checked for their comparability over time and across teachers. Changes in definitions, interpretations and data gathering processes can reduce levels of comparability, as can varying levels of conscientiousness in recording and reporting.

More challenging still are comparisons of students' levels of achievement over time. One approach to this challenge is to use the same test on different occasions; for example, to administer the same test to Year

8 students every year. This should provide data that can be compared from one year to the next. However, it is not always possible or desirable to use the same test on different occasions. For example, if the evaluation of an improvement strategy requires evidence of the progress students make during a school year, it may not be appropriate to administer the same test to the same students twice. Teachers often administer different tests on different occasions and, if test items are in the public domain (as is the case for NAPLAN tests), then it is common to develop and administer a new test each year.

The difficulty that arises from this practice is that it is not possible to make direct comparisons of students' raw scores on different tests. For example, a score of 19 out of 25 on one test does not represent the same level of achievement as a score of 19 out of 25 on a slightly harder or a slightly easier test. Some testing programs address this challenge by adjusting students' test results according to the difficulty of the test they have taken. In this way, students' performances on different tests can be reported on the same scale and compared directly. This is the approach used by the Progressive Achievement Tests (PAT), the National Assessment Program – Literacy and Numeracy (NAPLAN), the OECD's Programme for International Student Assessment (PISA) and the IEA's Trends in International Mathematics and Science Study (TIMSS).

But even the use of tests that have been 'calibrated' in this way does not guarantee the comparability of data from one occasion to another. For example, it may not be possible to compare test results from one year to the next if the testing conditions were different in the two years (perhaps because the described consequences for students varied) or if a significant proportion of students was absent in one of the two years of testing. A similar issue can arise in relation to survey data: Were the parents who responded to the parent questionnaire similarly representative of all parents in each year?

Meaningful change?

A second technical consideration is the meaningfulness of any observed change. Is an observed change in outcomes large enough to be interpreted as a significant improvement or is it within the range of expected random fluctuations?

Every test score has an associated degree of uncertainty or 'measurement error'. For example, a scale score of 56 on a test might have an associated measurement error of 3, meaning that a student's score is more accurately reported as 56 ± 3 or, with a high degree of confidence, is in the range 53-59. Because there is measurement error associated with both pre-test and post-test scores, small score changes over time can be within measurement error (also known as a 'confidence interval') and so may not be statistically significant. Wherever possible, measurement error should be taken into consideration when interpreting apparent evidence of improvement.

It is also possible for improvements to be small and statistically significant, but of little substantive or practical consequence. Usually, sustainable change takes time and meaningful improvements are achieved only over a number of months or years.

Evidence of trends?

Conclusions about improvement can be made with greater confidence when there is evidence of improvement over a number of occasions. For example, a steady upward trend in a school's Year 5 reading results over four years is stronger evidence for improvement and more suggestive of better teaching than an increase in the school's results between just two time points. Again, improvement is often a long-term agenda and the result of a cyclical process through which schools discover how to make improvements in practice to deliver ongoing gains in student outcomes.

Reflecting on what has been learnt

The final step in a school improvement cycle is a systematic evaluation of the success of a school's improvement efforts. This step provides an important opportunity for learning as a school and, ideally, involves teaching staff and other members of the school community. There is a particular focus on reviewing the implementation of the improvement strategy and on evaluating its impact on the intended outcomes. The lessons learnt here assist in guiding the school's future improvement efforts.

A vital step in any educational reform program or improvement initiative is the *evaluation* of the initiative's implementation and impact. Unfortunately, this step is very often not taken in practice. Rather than pausing to evaluate, educational decision makers often move quickly to the next round of reforms, foregoing opportunities to learn and contribute to professional knowledge about what works, for whom and under what conditions. A complete school improvement plan includes a plan for the systematic, collaborative review of a school's improvement efforts.

Evaluating success

A key question in this evaluative step is whether the school's improvement strategy resulted in the desired improvements in student outcomes. But this is only one of a range of questions that could be considered at this stage. Other questions that could be asked include:

Baseline data

Are we happy with the baseline data we used/collected? Did we have relevant and reliable information about the initial outcomes we prioritised for improvement? Do we have concerns about the reliability of the outcomes data, and if so, how might more reliable data have been collected? Are there other sources of evidence or other instruments that might have provided better data?

Did we have a good understanding of prevailing school practices at the time of drawing up the improvement plan? If we undertook a review of existing practices, how helpful was that? Did it give us a better picture of what was happening across the school? If we undertook only a self-assessment, might an external review also have been useful? Is it necessary to undertake another review this year?

Goals for improving outcomes

Are we happy with the outcomes we prioritised for attention? Were we sufficiently clear about what we were hoping to see improve? Would we still identify these as our top priorities or are there other outcomes that we should prioritise for the coming year? If we set targets for improvement, were these realistic? With the benefit of hindsight, were our targets overly ambitious on the timeline we set?

The improvement strategy

Were we sufficiently clear about the changes in practice that we believed were required to achieve the desired outcome improvements? Do we still believe that these changes are desirable? How well was this improvement strategy communicated to, and understood by, the school community, particularly those who would need to implement it? Were they adequately supported (for example, given adequate time, resources, support)? Did we achieve broad buy-in to the improvement strategy? Did we make best use of the data to present a compelling case for change? How could levels of commitment be improved in the future?

To what extent were the intended changes made? In other words, was the improvement strategy implemented as intended? If not, why not? Were there unanticipated impediments to implementation? How might these obstacles have been removed or overcome? Was there variability in implementation? If so, are there lessons to be learnt from those areas in which the strategy was most effectively implemented?

Measures of outcome improvements

Are we happy with the data collected to evaluate the impact of the improvement strategy? Are we confident that direct comparisons with the baseline data are possible – in other words, that the data were collected under similar conditions and using similar definitions and processes? If we used test data, were results on those tests reported in a form that allowed meaningful comparisons across tests and over time? How confident are we that any observed changes represent meaningful outcome improvements? If the tests we used included published confidence intervals (degrees of measurement error), did we take those into account in drawing conclusions about improvement? Do we have enough data to be able to see long-term trends in outcomes over time? Do these trends give us confidence that steady improvements are being made in the areas we have prioritised?

Overall reflection and learning

If outcome improvements were observed, how confident are we that these were the result of the improvement strategy itself? How confident are we that these are sustainable – under what conditions? If there were no measurable improvements, should we conclude that this strategy is not going to work, or was the problem one of resourcing and implementation? Is it simply that more time is required? Do we need to revisit the theoretical underpinnings of the strategy? What general lessons have we learnt from the development and implementation of this school improvement plan? Are there learnings that could be shared with other schools or with the profession more generally?

Future improvement planning

Each school improvement cycle provides the foundations for a school's next improvement efforts. Data gathered about outcomes in Step 4 provide baseline data for future improvement. These data may need to be supplemented with baseline data about other outcomes that the school intends to prioritise in the following year/cycle. Observations and reflections on changed school practices in Step 3 of the cycle also provide baseline data for the next improvement cycle. Thus school improvement becomes a potentially ongoing process of setting goals, designing and implementing improvement strategies and evaluating their effectiveness.

Most school improvement is incremental, but this does not preclude the possibility of schools implementing improvement strategies in the form of transformational, step changes in practice – radical changes in the conceptualisation and delivery of teaching and learning that have the potential to deliver exceptional gains in student outcomes.