

MAPPING YOUR SCHOOL ON YOUR DATA JOURNEY

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ABOUT THE AUTHOR

Selena is a researcher, speaker, and teacher who specialises in data storytelling. She is as enthusiastic about building data storytelling skills in others as she is in building her own understanding of the evolving ways data can support organisations to flourish and thrive.

For Selena, using data in a way that benefits humans – whether that be employees, clients, or leaders – is the only way to use data. Almost nothing will accelerate the impact we can have in our sphere of influence like having, and acting on, good data on the things that matter.

Selena has worked with hundreds of executives, senior and middle leaders, and organisational teams, to build their understanding of, and skills in data storytelling. This increased capacity has increased positive organisational change both in the way in which individuals view data, but more importantly, in the way that teams engage in evidence-informed collaborative decision making.



THE CHALLENGE

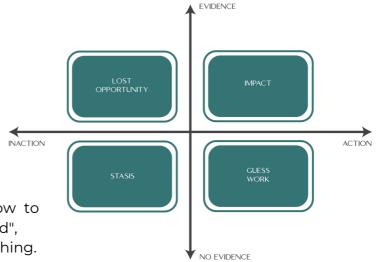
The amount of data in schools is increasing at an exponential rate, and with it, comes increased expectations that educators, schools, and school systems use this data to inform and improve their work. However, using data well is easier said than done, particularly given that technology and data are evolving, meaning there is no 'end point', and the notions of 'best practice' and 'ideal scenarios' are few and far between.

work For schools to lead this successfully, there needs to be genuine buy-in at all levels of the organisation. Data can, and should, be used to influence school-wide strategic plans, improvement annual departmental goals and plans, pastoral and year level approaches and plans, attendance and wellbeing programs, teaching teams' collaboration, and individual classroom practice.

The fact that most educators have never undertaken formalised data training and are largely self-taught, contributes to the unknown. In addition, the fact that different strategies and approaches work for different schools and contexts at different times on the journey, only adds to the challenge.

In "I'm not a numbers person: How to make good decisions in a data rich world" (2022), I shared the following quadrant model and offered an opportunity for readers to reflect on where they sit individually - either in stasis, guess work, lost opportunity, or (ideally) impact in terms of their own use of evidence to take action. Over the last five years these conversations have not been limited to individual positions, however, leaders want to know what it looks like for schools to sit in these quadrants.

Therefore, this paper zooms out from the focus on the individual and unpacks the same four quadrants in the model from the perspective of the school more broadly – on balance, what does it look like when a school is having an impact, experienced lost opportunity, engaging in guess work, or sitting in stasis. While our learnings will continue to evolve, there are so many commonalities across highly effective and impactful schools that are worth sharing.



From: "I'm not a numbers person: How to make good decisions in a data rich world", Dr Selena Fisk, 2022, Major Street Publishing.

THE FOUR QUADRANTS

This quadrant model considers the amount of evidence that is used in the school and the action that results from the use of evidence. As always, my emphasis on the use of this data to inform action is that it should be done in way that is data-informed, never data-driven. When we are informed by data, we use our understanding of the data, with our understanding context. and our professional experience, to help guide our decisions.

Evidence continuum

All schools sit somewhere on the evidence continuum, from tapping into very little evidence (at the bottom) to seeking extensive amounts of evidence (at the top). The label 'evidence' here, relates to both in-school evidence (such as student data) and out-of-school evidence (such research as thinking about best practice). Schools should be harnessing the power of both what they know about their learners, as well as what the research suggests could work well in their context. There cannot be one without the other - they are like peas in a pod.

Action continuum

Every school is also positioned along somewhere the action continuum - from taking very little action and making very little change (on the left) to being highly responsive and open to change (on the right). The success of change efforts does not impact the position here - it is about whether the site is open to learning, trying, and looking for opportunities to improve.

Stasis, guess work, lost opportunity, and impact

When considered in this way and by making an on-balance judgement, schools fall into one of the four quadrants. Although rare, if a school is in stasis, they are using little evidence and making few changes; if a school is in guess work, they are trying new ideas and innovations but without an understanding of school data and/or research evidence; in 'lost opportunity' schools are not harnessing the full potential of the evidence to lead action; and when using the data to lead change, schools are able to have an impact on the learning culture.

THE IMPACT QUADRANT

Schools that are truly evidence-informed and responsive, use data and evidence regularly and it permeates everything that they do. They believe in the power of data storytelling, and know how it can be transformative for young people. Data from a range of sources (including academic, perception, wellbeing, attendance, engagement, and learner dispositions) is collected and used formatively - it informs the work, helps set goals and plans, and helps predict what might happen in the future. The use of data and evidence is embedded in the culture of the school, and school processes and structures support educators to engage with and respond to the data for students in their care, including timely professional learning and upskilling when new data sets and/or technology emerge. Educators view the data through both the lens of achievement data as well as progress data, and there are deliberate and planned opportunities for celebration of good results and growth with staff and students. The technology that the school has supports the use of data for all educators, and inquiry or action research cycles support the review and adjustments. The school has a data plan that demonstrates how different user groups use different data sets, and the plan is used, updated by staff regularly. In addition, teachers have their own plan for how and when they use data in their classrooms.

Middle leaders use the data with their teams and cohorts to enhance the impact that they and their team have, and they work with educators to build their confidence and capacity in using evidence of impact. They bring insights to the team, and facilitate conversations about what others see and opportunities for growth. They are able to identify areas of celebration as well as areas that would benefit from additional focus and improvement.

Teachers keep their own records and are responsive to the unique needs of learners in their classroom. They value and collect formative information more than summative assessment, and they triangulate information to inform their pedagogical decisions. They use evidence with and for students to develop data-informed learners, and regularly reflect on student achievement, goals, and progress to date, to shape and maximise the impact they have on their students. They recognise that students respond to different strategies at different times, and they call on a tool kit of strategies to help move students forward. They are constantly learning, revising, adapting, reflecting on their impact, and adjusting (both in formal processes and informal) and positively impact the learners in their care.

IMPACT

EVIDENCE

THE LOST OPPORTUNITY QUADRANT

Schools in the lost opportunity quadrant often have pockets of good practice in their teams, but it is not yet replicated across the school. Educators may understand the importance of using data and evidence in their work, but they are not yet harnessing it – nor data storytelling – to their full potential. The school may or may not have a data plan – they may still rely only on a data or assessment schedule, which lacks detail and guidance for educators on how data is used in practice. In this quadrant, looking at data is often seen as an 'event' - where data and trends are communicated to staff and shared with them at key times, by key leaders; however, staff are not authentically engaged in conversations about what it means for practice. They might assume that data belongs in someone else's role description, and they work only with data they are given; or they may be unsure as to how to act on the data in their classroom.

Many schools fall into this quadrant.

Although some middle leaders might be operating in the impact quadrant, not all will be; and those who are not might not yet see the value in using data, or might not have the skills or confidence to use it with their teams. The first sharing of data with staff for middle leaders in this quadrant is often them telling educators what the insights and trends are, but over time, this will hopefully shift more towards data conversations and dialogue. Middle leaders might not yet understand how to guide their teams by looking at trends across year levels, assessments, cognitions etc, and may be learning as they go.

Teachers in the 'lost opportunity' quadrant might understand the value of data, but do not yet know how to connect this data to storytelling, action or pedagogical practice. They might be unsure how to identify insights, not trust their skills in using the data, or be unsure how this can be used to inform their day-to-day work. These educators might hold the false assumption that using data requires them to make significant or large changes to their practice, without seeing the small tweaks and adjustments that work. In this case, they might not be using and collecting their own formative data in a deliberate and systematic manner, but rely heavily on standardised and summative data sets which are often far-removed from day-to-day student needs, and do not always make progress and growth visible.

The school might not yet have a strategy for triangulating data and for tracking and monitoring progress, and/or technology that supports this process. Educators may feel tied to unit plans and feel there is little flexibility in them being 'allowed' to modify their

practice for their students, and/or there may not be processes in place that allow teachers to explore, talk, and refine their work based on the information they have on their learners.

LOST OPPORTUNITY

INACTION

VIDEN



THE GUESS WORK QUADRANT

ACTION

GUESS WORK

The main distinguishing feature of schools in the 'guess work' quadrant is that they have a culture of being innovative and trying new approaches, but they do not adequately tap into school-based evidence and/or research evidence to inform their decisions. In this quadrant, schools, leaders and teachers are not overly strategic in their intention or plans, but are more reactive and responsive to what they think needs to occur.

Educators who feel they are being pushed from one change priority and focus to the next, or to 'the latest shiny thing' are in the guess work quadrant, because leaders have not necessarily been deliberate and strategic about what the school needs, and have not persisted with other change efforts for long enough. When schools and teachers feel like this, they might choose to react and respond in ways that are not measured or grounded in research, potentially because of time, and/or because they have not yet accessed the evidence.

In another way, schools might find themselves in this quadrant if they do not have school-wide systems and processes to support change, meaning that teachers might be doing whatever they can to make it work in their classroom. In complex and challenging contexts, guess work often occurs, rather as a survival mechanism, than a deliberate plan. Trying to keep their head above water, so to speak, means that there is no deliberate collection and use of student data or research literature.

Finally, educators may be trying to do their best for their students, but the school does not have data structures in place that enable staff to easily and regularly access data on their students. They might restrict access to certain data sets (and not promote a data democracy), have technology that is inadequate or requires staff to access data in a range of places, or does provide adequate professional learning and meeting structures to support the analysis of data across teaching teams. Professional learning in data and evidence has not been a priority for schools in this quadrant, and often this is reflective of the limited value that leaders place on evidence and data storytelling.

THE STASIS QUADRANT



Schools that are brand new to using data, or who do not yet appreciate the power of evidence and data storytelling to transform their work, are in the stasis quadrant. While there is ample data available to all schools and educators in virtually every site and context, schools in the stasis quadrant are not tapping into the evidence available to them, and they are not yet trying to modify, adapt, or evolve their work to benefit the school community. They are doing what they have always done, despite the changing needs of their students and educational landscape.

There are very few schools in this quadrant.

If a school was in this quadrant, they might have some staff who look, superficially, at standardised assessment data, but there is no sharing or action with broader staff. They might look at broad trends across standardised or summative assessments only, but do not value, plan for, or promote the collection of formative assessment and data. Middle leaders might not be up-to-date with contemporary educational research and best practice and/or, there could be a long-held culture or way of doing things that is not easily changed.

In most cases, schools in this quadrant would not have technology that supports the visualisation of data, they would generally not have a data plan for the school, they would not be providing professional learning for staff, and they would not have inschool processes to support and promote regular conversations between educators to build capacity in using evidence to inform their practice.

If data is shared with staff, it would be an 'event', where limited or no action is taken as a result, and there is no longitudinal or growth conversation associated with the data. There may be a general dislike of the notion of data, and/or a fear of how it might be used, leading to assumptions about use relating to accountability only.

IMPROVING YOUR SCHOOL'S

POSITION

Regardless of where your school is on your data journey, there is an opportunity to learn and grow and take steps forward. Many of us were never taught how to use data in our classrooms or to lead our schools, hence the difficulty as many educators are self-taught and trying to work out the best way forward.

In some ways, the easiest progress to make is for those schools who are in 'lost opportunity' quadrant, as the goal should be to move along the action continuum so the evidence is used to inform and enhance practice. This culture can be shifted by implementing action research cycles with educators (or an equivalent) where discussions begin with evidence of student learning, and teachers focus on ways to adjusts and shifts their practice based on the data. Rigid unit plans that lead to limited flexibility in being able to be responsive to student needs and formative data do not help - teachers need permission to use the data to modify the unit as they progress.

From the 'guess work' quadrant, schools should aim to move up the evidence continuum. To do this, teachers need access to, and need to understand the data they have, and the research that relates to effective practice. Building individual data literacy, data visualisation, and data storytelling skills is the main thing that needs to happen in this quadrant, followed by explicit expectations that data and evidence should be informing decision making wherever possible. Provide examples of what this looks like, model it in your role, and celebrate and share when teachers do it (and students show improvements).

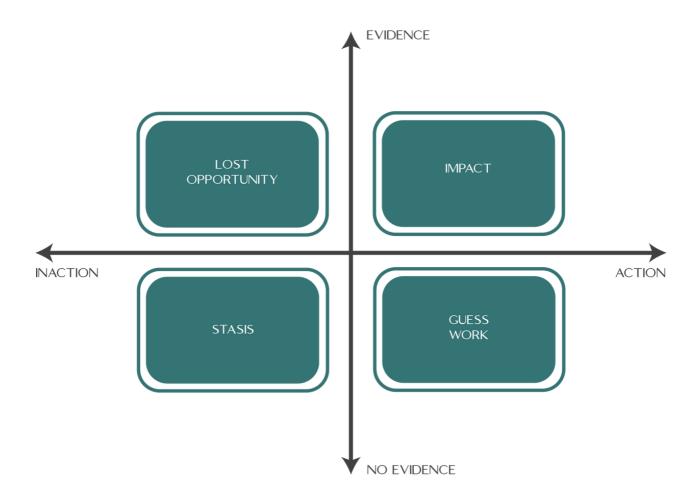
If you are in the 'stasis' quadrant, movement needs to occur up the evidence continuum and across the action quadrant. The first priority is ALWAYS to build capacity and skill (see the previous paragraph) to move the school up the model, before we move across. We do not want schools and educators trying first to take action and change what they are doing, without it being grounded in the evidence that is available. There is a good chance that if they do this, they will not experience much success, and they will quickly fall back into the 'stasis' quadrant. Alternatively, when we build skill and understanding of evidence first, to the point where they are 'above the line' and into the 'lost opportunity' quadrant, THEN we can think about how we promote, support, and encourage reflective practice and action (see the second paragraph on this page) to move across the model.



IMPROVING YOUR SCHOOL'S

POSITION

If your school is in the impact quadrant, then you should recognise and celebrate that achievement. You have obviously invested significant time, effort, and resources to get to this point, and your students are benefitting. Like everything, we can always take a few more steps forward, and be better tomorrow than we are today. Think about WHERE in the impact quadrant you are. Are you stronger in evidence, or in action? How could you move the lower one further along the relevant continuum? Schools in this quadrant recognise and openly acknowledge that we are all constantly learning and evolving, and that being in this 'impact' quadrant will grow and look different in 5 or 10 years' time. Constant learning, reflection, adaptation, and a willingness to learn, will ensure you and your teachers remain in this quadrant in the future.



From: "I'm not a numbers person: How to make good decisions in a data rich world", Dr Selena Fisk, 2022, Major Street Publishing.

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RESOURCES TO SUPPORT

<u>Data</u> <u>Champions</u>	An 8-day professional learning program and action research project that builds the capacity of school data champions, and increases their impact in their sphere of influence. 2024 expression of interest is available here.
Online Course	This course is full of resources and learning in the three key elements of using data in schools: data literacy, data visualisation, and data storytelling. Learning occurs through engagement with short videos, links to online resources, readings, and engagement with the community of learners. Each participant receives lifetime access to the content on the 'Data Storytelling for Educators' course as well as a certificate of completion for 8 hours of professional learning. Individual and school subscriptions are available.
Free Data Diagnostic	The free schools data diagnostic has been completed by over 3500 educators. It assesses skills in the areas of data literacy, data visualisation, and data storytelling. It is a tool that is useful for individuals (as they get their own pdf report) but also as a meeting resource for teaching teams.
School Data <u>Diagnostic</u> summary	If you would like to see how your staff have self-reported their data literacy, visualisation and storytelling skills, you can order a de-identified school summary report. You will receive your report within 5 business days of your staff completing the individual diagnostic.
Workshop facilitation	Audience: small groups/ whole staff / systems Length: Half or full day sessions Possible topics include: -The context of using and analysing data in schools -Data storytelling - what is it and what does it look like -Leading data-informed change
<u>Keynote</u> presentations	Audience: whole staff/ systems/ networks Length: Up to 90 minutes (keynotes) Possible topics include: -The context of using and analysing data in schools -Data storytelling - what is it and what does it look like -Leading data-informed change



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