

# The Emperor's perfect map: leadership by numbers

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**Abstract** This paper establishes that system-generated data profiles are influencing the work of principals in three Queensland state schools. Drawing upon Foucault's notions of governance, as well as research emphasising performative cultures and the importance placed upon numbers and data in education, this paper uses the tale of the Emperor's map as a metaphor to explore the way principals' work is being influenced by specific sets of data compiled by the department. These data profiles are representative of external accountabilities and high stakes testing regimes, as seen in systems that have adopted neoliberal policies which attempt to quantify the work being undertaken in schools. The paper demonstrates that principals are being constructed in part by discourses from a system that emphasises these system-generated performance data as a driver for school improvement.

**Keywords** School principals · School improvement · Data · Performativity

## Introduction

In *The Postmodern Condition*, Lyotard (1984) refers to Borges's tale *On Exactitude in Science*, wherein an emperor sought to create a perfect map of his empire due to his fondness for cartography. The citizens of the empire responded with such dedication to the task that all other pursuits were abandoned, and the empire was left in ruins. Principals in Australian schools are working in conditions where high-stakes testing, public accountability through the transparency of data, and

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managerialist discourses including benchmarks and targets form part of the policy landscape (Hardy 2013; Lingard and McGregor 2013). This leads to a direct expectation that principals will make use of these specific types of data in their work as school leaders. However, like the citizens of the empire creating the perfect map and eschewing all other pursuits in the process, could pursuing an agenda focused on these specific types of data result in principals focusing on a narrow set of educational practices?

This paper presents findings from three longitudinal case studies of Queensland state school principals to argue that school leaders are being considerably influenced by a system-generated 'school performance' data profile, which is developed by the Department of Education and disseminated to schools with updates throughout the year. It provides graphical and tabular representations of student data from the National Assessment Program (Literacy and Numeracy) [NAPLAN], school-based assessment achievement data, demographic and enrolment data, and disciplinary, attendance, and retention data. The profile also incorporates managerial data including financial and audit data, and workplace health and safety data. Bloxham, Ehrich and Iyer (Bloxham et al. 2015) suggest that the profile is indicative of, and closely aligned to, the department's improvement agenda. This agenda includes a focus on student achievement (represented in the profile by NAPLAN and achievement data), student engagement (represented by attendance, attainment, and retention data), and targeted use of resources (represented by financial and resourcing data). The profile is used in discussions with principals' supervisors to guide performance management processes as part of the system's emphasis on data. The primary method used by supervisors to monitor the performance of schools, the profile is a collation of the data being used to monitor school and, by extension, principal performance (Bloxham et al. 2015).

The paper explores the way this emphasis governs and steers the work of principals from a distance by directing their attention to certain aspects of education, as measured by the data profile. These case studies were conducted over a period spanning 3 years, with a focus on three experienced Queensland state school principals: Max, Judy, and Scott.<sup>1</sup> In order to better understand the factors influencing principals' work, this paper draws upon the concepts of performativity (Ball 2003; Lyotard 1984) and Porter's (1995) critique of the trust placed in numbers and data as an allegedly objective measure of the effectiveness of the complex work undertaken in schools.

The paper contributes to research on the impact of performative cultures on principals' work in Australian schools (for example, see: Hardy 2014; Keddie 2013; Lingard and Sellar 2013; Niesche 2011, 2013a; Singh 2014; Thompson 2013). It proposes that like the creation of the Emperor's perfect map steered the citizens of the empire into an all-consuming focus on cartography; the emphasis on data—and this data profile in particular—has steered principals' work into a focus on improvement in ways that has changed their behaviours over time.

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<sup>1</sup> All participant and school names have been replaced with pseudonyms.

## Theorising the research

### Performativity

In *The Postmodern Condition*, Lyotard (1984) examines the notion of performativity and made predictions about the way efficiency would trump the pursuit of knowledge for its own sake. Ball (2003, 2005) draws upon Lyotard's work to discuss the impact of the constant monitoring and measuring of outputs related to the work of educators. Performativity is a means of regulating individuals and systems through the use of judgments and comparisons, as well as measuring their performance and identifying moments of 'quality' (Ball 2003), a notion which is entrenched in educational leadership discourse (Moore 2004).

In a climate of performativity, complex work undertaken in schools is reduced to quantifiable or measurable data sets, and judgments are made about the quality of the educator based on these data. The importance of measuring, quantifying, and (ostensibly) objectively qualifying the work undertaken by educators links clearly to the other key means of theorising the data within this research; that of the trust placed in numbers when assessing the work undertaken in schools.

### Leadership by numbers

The sociology of numbers and the related critical analysis of the way measurable data are driving the work being undertaken in schools is an important element of theorising the data presented within this research. These notions provide a basis for problematising the emphasis being placed on data by the education system in which participants work. Porter (1995) discusses the power given to numbers and the notion of objectivity—a contested notion in relation to education (Ball 2003). Objectivity is implied by the presentation of numbers, facts, and figures in standardised forms that do not take local context or complexities into account.

This presents the impression that these numbers are fair and rigorous representations of the work being undertaken in schools (Porter 1995). Indeed, 'objective' data may be adopted as a means of making this work measurable or accessible to those with little knowledge of the field; providing licence to make judgments without having the expertise to support these judgments. This idea of minimising complexities and providing standardised understandings of large-scale concepts (in this instance, education) is also noted by Desrosieres (1998).

Porter draws upon work from Foucault (1973) and Rose (1990), who identifies that these measures work in a cycle to construct the behaviours they are intended to measure—evidence of Foucault's notion of governmentality at work. Porter suggests that these numbers create norms, which are one of the most effective ways of steering behaviour from a distance; a concept elaborated upon further by Niesche (2011). This notion of steering principals' work from a distance has also been discussed by other researchers (Thompson and Harbaugh 2013) including Lingard and Sellar's (2013) suggestion that Queensland's education system has not

changed so much as it has been reconstituted around certain ways of working, many of which are driven by numbers and data.

### **Discipline and Governmentality**

The influence of the profile on principals' behaviours can be examined through the lens of Foucault's notions of governmentality and discipline (Foucault 2000a, b). If discipline can be seen as the way individuals and populations (individual principals, and principals as a group) are managed and guided by the system, the profile acts as a tool of surveillance to allow the system to monitor and measure principals' work. Governmentality explores the idea of the way principals' conduct is guided. Niesche (2013a) and Gillies (2013) both explore this concept and discuss the ways governmentality, through these discourses and tools of surveillance, shapes principals' behaviours and even their thoughts, as they seek to rationalise these behaviours. Whereas in Borges's analogy the Emperor explicitly directed his citizens to focus on cartography, the influence of the data profile as a 'map' is more subtle in its governing of principals' behaviour. In this sense, the implication of the data profile is significant as a means of disciplining principals to behave and even think in ways deemed most effective by the system producing the profile. Max and Scott, as well as Judy to a lesser extent, represent the notion discussed earlier of workers who embody the system ideal of using school performance data to shape their leadership views and practices.

### **Research context**

Principals working in Queensland state primary schools have had to navigate a rapidly changing education landscape, particularly since the introduction of NAPLAN testing, where Queensland was perceived to perform poorly in contrast with other Australian states and territories. The Queensland state schooling system implemented a strategic agenda developed via recommendations from reports commissioned from researchers including Geoff Masters from the Australian Council for Educational Research [ACER] (known colloquially among principals as the Masters report) (Queensland Department of Education, Training, and Employment [QDETE] Queensland Department of Education, Training and Employment (QDETE) 2012a), and Michael Fullan and Ben Levin (QDETE 2012b) who worked as school improvement consultants for the state schooling system. This strategic 'improvement agenda', *United in our Pursuit of Excellence* (QDETE 2011), explicitly required principals to act as instructional leaders. According to this agenda, teachers and school leaders were required to use school and system data to guide their goals for school improvement under the notion of an 'unrelenting focus on improved student achievement' (QDETE 2011), which became an explicit priority for all schools upon the release of *United in our Pursuit of Excellence*. The purpose of this wider study was to better understand how the introduction of this new improvement agenda would shape leaders, and leadership practices, in Queensland.

## Research methodology

The data within this paper were gathered as a part of a wider research project. Through three embedded longitudinal case studies, the wider project explores the ways principals conceptualise their roles, as well as how policy influences their visions and governs their behaviours from a distance. The case studies were undertaken over a period of 18 months, spanning three school years between 2013 and 2015. The research focused on three experienced Queensland state primary school principals, Max, Judy, and Scott, all of whom work in particularly complex school environments.

## Participants

Max is the principal at Riverdale State School. He identifies Riverdale as a formerly 'leafy green' school with a long history of tradition and a reputation within the local area as being high performing. The school has experienced a shift in demographics in its local area in recent years, and rather than students with few diverse needs from high socio-economic backgrounds, the majority of the school's students now come from disadvantaged backgrounds and have a high level of needs. In addition, over 10 % of the student population comes from a language background other than English. Max has been in the principalship for over 30 years and prior to taking up his current position at Riverdale, he worked in a number of senior positions within the department, returning to a school in order to 'practise what [he] had been preaching' for many years.

Judy has also been in the principalship for over 30 years and her school, Merriwald State School, supports a significantly higher number of students with high levels of complex needs than is commonly seen in mainstream schools. She noted that whereas schools might generally see around 5 % of their population being students with disabilities, over 10 percent of students at Merriwald are part of the Special Education Program. In addition, they support a large number of students in care and students from 'difficult backgrounds', as Judy described it; students from 'some blended families that create a lot of complexities within the school'. Families travel past other schools in the large regional city in which Merriwald is located, and some of the families at Merriwald have relocated from other cities and towns in order to attend this school due to its reputation for excellence in supporting students with diverse needs.

Scott is the principal at Applewood State School, a rural school in a town coming off a mining boom, which has resulted in falling enrolments and employment concerns within the town. Applewood elected to become an Independent Public School, part of the federal government's program to provide schools with more autonomy and local decision-making. The government's intentions, advertised widely, were that the introduction of Independent Public Schools would provide schools with localised control over budgeting and staffing, cut through red tape (echoing much of the government's rhetoric at the time of the program's

introduction about the public service and bureaucracy), and provide principals with more autonomy to make decisions about their schools (Kane et al. 2012). These claims were further supported by proclamations that the program would allow schools to attract ‘better’ teachers (though no clarification was provided about what constituted a ‘better’ teacher, or how teachers were being rated), and to create ‘innovative educational programs’ which would lead to school improvement (Ironsides 2012). Scott has been the principal at Applewood for almost 15 years and worked as principal of a number of small schools prior to taking up his current position.

Additional insights in these case studies were provided by departmental staff members working with principals in this particular geographical region. Richard, an Assistant Regional Director (ARD) directly supervises some of the participants and has worked closely with all of them in recent years. Tracy, a project officer, focuses on leadership and school improvement by working with principals and teachers in a coaching and mentoring capacity while also facilitating change processes and professional development at a school level. These perspectives enabled an exploration of some of the tensions between school leaders and representatives of the department in terms of perceptions of pressures, expectations, and support that is available to principals.

## Methods

The case studies were undertaken primarily via semi-structured interviews which ranged between one and two hours in length and were undertaken at staggered intervals approximately six to eight months apart between 2013 and 2015. Initial questions were developed to ascertain an understanding of principals’ experiences or opinions, particularly in relation to their perceptions of the evolution of their role over time. Questions were also asked to determine whether the principals held shared or similar understandings of current educational leadership discourses such as accountability, autonomy, and instructional leadership. These initial questions were drawn from the literature relating to research on performative cultures in Australian schools and the Queensland context in particular, as shared by Max, Judy, and Scott (for example, see Hardy 2013; Hardy and Boyle 2011; Lingard and McGregor 2013; Niesche 2013a, b).

Beyond these initial questions, interviews were guided by participants’ responses as well as by any issues that influenced their work either at a school level such as local initiatives or challenges, or within the wider system such as NAPLAN testing, the release of data, or political and media influences on their work. Interviews were recorded and transcribed, whereupon transcripts were analysed using a theoretical thematic analysis (Braun and Clark 2006) consisting of multiple stages of analysis.

## Findings: the evolving role of the principal

Max, Judy, and Scott all commented upon the rapidly changing role of the principal. During their careers, they have witnessed a great many shifting expectations, as well

as multiple incarnations of the role. They each responded that when they joined the principalship, the focus of their role was to manage communities and essentially 'keep the peace' (according to Judy), and there were fewer external accountabilities.

The role of the principal has rapidly evolved in order to keep up with expectations and requirements being added by the system (Thomson 2009). Principals are seen as being central to school improvement efforts (Dufour and Marzano 2011; Niesche 2011) and as reform efforts have intensified over recent years, so have expectations and pressures on principals. While research suggests that since the 1980s, principals have been working in landscapes that feature increasing external accountabilities and a heavier focus on systemic directives (Brown 2005; Rousmaniere 2013), Max, Judy and Scott reflected that the principalship in previous years was less dependent on external accountabilities and more focused on the school community. Each of the principals indicated that it was only since 2008 that conversations with their supervisors have shifted from management issues to the current discussions of curriculum, data, student achievement, teacher development, and other educational leadership elements. Scott recalled:

So I think probably between the start of [arriving at 'Applewood'] to here... for the first number of years [...] all I was doing was managing behaviour, managing budget, managing teachers. I wasn't really doing much with curriculum because it wasn't the focus. The main focus was school opinion surveys—just making sure they were under control. Then NAPLAN came along and of course we all got our arses kicked because we had never focused on curriculum.

The discourses of 'crisis' in education that have driven these changes are not new, having first appeared in Australia in the 1800s (Bessant 2011). Thomas (2003) identified the media construction of discourses of crisis relating to Queensland public schools, and Garrick (2011) highlighted the use of crisis discourses to promote a sense of urgency in the Rudd government's education policies. These discourses of crisis intensified in Queensland after the introduction of NAPLAN testing in 2008, in response to Queensland's perceived poor performance.

Max, Judy, and Scott all commented upon the increasing requirements for principals to work with data in order to enact the system's agenda for improvement. This paper focuses on one aspect in particular of this improvement agenda; the emphasis on data at an individual student, whole school, and system level. Principals are explicitly required to lead their schools with a focus on data as a driver for decision-making and these requirements are reinforced through multiple strategic and departmental policies and processes. The state government's current strategic agenda for education requires principals to 'know [their] data' in order to monitor performance and inform practice and to 'analyse student data regularly to inform improvement' (QDETE 2014). Furthermore, the strategic agenda directs principals to other policies and processes that incorporate an emphasis on the use of data, such as the *School Performance Assessment Framework* (QDETE 2015), which focuses on the importance of school data in monitoring schools on a quadrennial basis. The *National School Improvement Tool*, the guideline used for

these quadrennial reviews, incorporates a heavy emphasis on the use of school performance data to drive school improvement. One of the nine key domains within the tool relates to ‘analysis and discussion of data’ (ACER 2012) and references to the use of data can also be found in three of the other domains. The expectation for principals to be data-literate and data-focused is clear and pervasive in messages from the system.

### The school profile

The school performance data referred to in these documents primarily take the form of a *School Data Profile* compiled by the School Improvement Unit [SIU], a subsection of the education department which is primarily responsible for monitoring school performance through the metrics found within the profile. Schools receive four updated versions of their profile each year, at points aligning with releases of key data such as NAPLAN and annual School Opinion Survey data. The profile is currently six pages of multiple representations of data, but in the past has been twice that size. It contains a range of school data such as student achievement data (including NAPLAN, school-based subject achievement, and Closing the Gap data); student demographic data (including enrolment, student needs, attendance, and disciplinary absence data); and school management data (including school audit data, school opinion survey results, and financial and facilities-related data). A key focus of the profile is multiple representations of NAPLAN data, presented in eleven different formats across two and a half pages. Just over 40 % of the profile relates to NAPLAN data, providing an insight into the importance placed upon NAPLAN as a driver for school performance management and review. Aligning with discourses of transparent data-based accountability espoused by the system, this means that the proliferation of data, and the data profile itself, are key tools in the management and supervision of principals.

The data profile thus becomes a tool of surveillance, acting as the means by which the system monitors and judges the work being undertaken in schools (Foucault 2000b; Gillies 2013). Principals are expected to use data to inform their practice while ‘delivering extraordinary and sustained improvement and achievement’, according to explicit expectations from the system (QDETE 2014, p. 1). A recurring theme throughout the research undertaken in these case studies was the centrality of this data profile to each principal’s work. Max, Judy, and Scott all placed great emphasis upon the profile and used it in a number of ways. In fact, they referred to it as the measure of school improvement—as principals, their position description emphasises their role as being to improve educational outcomes at their schools. The profile is used as a measure of improvement by the principals, their supervisors and other regional support staff, and other departmental staff such as the unit tasked with monitoring and improving school performance. Thus, the profile—or the ‘map’ of their school’s progress towards improvement (as defined by the system), is central to the principalship.



## Findings and discussion

Key findings arising from the research in relation to the data profile were that principals were using the profile as the definition and measure of school improvement and that their behaviours and beliefs as leaders had been shaped by the influence of the data profile. This will be discussed in further detail in relation to the way principals are being disciplined by the existence of performative cultures where measurements of principals' work, via their responses to the data contained within the profiles, form part of the judgment of their effectiveness in their roles.

### School improvement

The discourse of 'school improvement' guides principals' work explicitly through policy documents and discourse from principals' supervisors and system leaders, so it is vital to have an understanding of what school improvement actually is. In order to better understand principals' perceptions and enactment of these 'improvement' discourses, Max, Judy, and Scott were asked how they defined school improvement, given that it forms such a large part of their role. In their responses, the importance placed on the data profile became clear. All of the principals' very definition of school improvement came directly from the data profile. Max, in particular, defined this with certainty:

Well, we went through that period of defining what school improvement is, or not really knowing what that was. School improvement now, though, is very clearly defined in terms of what they call the ten-page data set—that's your school's data profile. And that is everything around attendance, tracking individual students for literacy and numeracy in particular. And things like NAPLAN sit there to be able to provide that sort of data. And school improvement, particularly about student improvement, talks about the actual effect size for individual students. So we're very clear in our minds around that.

Each of the principals expressed sentiments that they were appreciative of the clarity they felt the profile has provided in relation to providing a compilation of the metrics on which they are being measured and expected to attend to as school leaders. This raises some questions about how autonomous principals really are in an environment where system rhetoric espouses principal autonomy as a key feature of the landscape (Gobby 2013; Gray et al. 2013). If principals are expected to draw their school focus from the data contained within the profile, it could be argued that they are less able to exercise their professional judgment in determining the school's strategic agenda based on their experiences and knowledge of the school context or needs. Indeed, each of the principals in these case studies confirmed that their school's strategic agenda now arises directly from the data profile.

In performative cultures, principals' effectiveness is measured and judged according to externally imposed targets and benchmarks, with the data profile acting

as a physical manifestation of this practice. Principals who are seen to be achieving well, as measured by the data profile, are judged to be quality leaders and afforded more freedom and trust (Singh 2014). This discourse of quality is measured in multiple ways in performative cultures, and the most common measure of quality at this point in time for principals in these case studies was improvement of their school performance data, as measured within the profile. This was confirmed by Richard's and Tracy's descriptions about the ways principals are monitored and deemed to be effective, and it was also supported by a recent study (Bloxham et al. 2015) which found that the document is the 'primary data set and point of reference employed by supervisors when monitoring Queensland public schools' (p. 357). In a performative culture, where being seen as a quality or effective leader is of great importance (Keddie 2013; Singh 2014), improvement in the data measured by the profile becomes a key driver for principals' work.

### **Discipline and governance of Principals**

Principals' behaviours have changed to align with the emphasis on data, but more than this so have their beliefs in some cases, which is representative of Foucault's (1994) ideas of governmentality (Niesche 2011) and, in this case, individuals' thoughts and beliefs becoming aligned with system expectations. Gillies (2013) notes that the ultimate aim in a modern neoliberal society, such as the one in which Max, Judy, and Scott are working, is the creation of 'self-governing individuals', or principals who embrace and embody the ideals and vision of the organisation at an individual level (p. 15). If principals embrace and embody the ideals of improvement at their individual school level and focus on improving the data within their profile, the system will benefit as a whole with improved data state-wide. The importance of this becomes clear upon considering the level of public discussion about state performances each year when NAPLAN results are released. Lingard and Sellar (2013) identified the way NAPLAN tests have become high stakes for systems as well as schools, outlining the fact that systems are beginning to manipulate these data and their targets to ensure that they can claim to have achieved success. This is likely due to the political pressures created by high stakes testing (Gonzales and Firestone 2013) as well as the intense media scrutiny of the NAPLAN tests each year (Cumming and Dickson 2013; Lingard and McGregor 2013).

According to participants, much of their work is now guided by data, and the profile plays a significant role in helping them to make decisions about school priorities and where to direct their focus. This is a natural response to working in a performative environment. The very nature of performativity influences principals as subjects within the system. As Lyotard (1984) comments, no self is an island, and each of us exists in a complex network of relationships and interactions. Principals are shaped by discourses of performativity and explicit expectations and have no choice but to respond to the culture and that climate. For example, as previously discussed, there is a very explicit expectation that principals will make use of this school performance data to guide their work. Whether or not principals do this, they

are working with or against the system as a result. This can be further understood by considering Lyotard's (1984) discussion about language games. When a performative 'statement' is made, such as the expectation to work with data, or to use the data profile, principals are impacted by the very existence of the expectation and the environment in which they enact their work is immediately altered. Comments from Tracy, who works with principals across the region, indicate that the impact of the proliferation of data has been immense.

Tracy believes that the continued release of data—deemed important enough by the system to warrant four re-releases of the updated profile each year—has hampered principals' abilities to engage in longer term planning. Instead, principals are so focused on addressing the latest 'thing' (in Tracy's words), that they are working in reactive states, reacting to each new piece of information and changing focus as a result of the updated releases of data. Lyotard (1984) discussed the notion of moves and counter moves—in this case, releases of the data profile, and principals' changed behaviours as a response. He explained that by necessity, moves require counter moves, but that 'a counter move that is merely reactionary is not a good move' (p. 16). Tracy's comments, right down to the same phrasing, are reflective of this. She noted that this reactionary response to system initiatives is happening with more frequency, and suggested that over time, principals are losing the ability to take a strategic 'helicopter' view of leadership, identified as being vital in implementing effective long-term change for improvement (Lewis and Andrews 2009).

An analogy can be drawn here to the emperor's map. The data profile, the representation of the school's performance according to system requirements, has become such a major influence on principals' behaviours that it has resulted in what some may argue (based on Tracy's observations) is an alteration of principals' abilities to lead in the ways that can lead to the long-term improvement that the system is ostensibly seeking. Like those citizens of the empire, there is a possibility that principals focusing solely on the data profile to guide their work could become trapped in a quagmire of short-term quick fixes.

While Judy felt that the data provided clarity to make some decisions, she also engaged in counter-conduct to an extent, as described by Niesche (2013b) to describe her frustrations of the trajectory she sees education taking towards a narrowed focus (see also: Thompson and Harbaugh 2013). The importance, for Judy, is more about aligning with system requirements rather than embracing them herself in her own leadership philosophy. She noted:

For us probably as EQ employees we're driven by what *they* class as school improvement, and that's around the accountability for improvement of results in things like NAPLAN, it's driven around that, it really is, and politically and everything it's all about that [...] and that [school data] profile is gold.

Conversely, Scott and Max wholly embraced the use of data as the driver for their work as school leaders. Max described the emphasis placed on data at staff meetings, commenting that 'we spend an inordinate amount of time in staff meetings looking at what the data is'. A common theme arising from interviews was that the increase in availability of different types of data over recent years has

resulted in more precision, aligning with Porter's (1995) suggestion that data are perceived as being able to provide an ostensibly 'objective' measurement of complex work undertaken in schools. When Richard was asked if he has a clearer picture of what is happening in schools than he might have ten years ago, due to the plethora of data now available to him, he responded that 'there's a greater degree of precision now'; phrasing which was also reflected in comments from Max and Scott.

Scott's discussion about the shift in supervisory practices as a result of the increased data surveillance directly echoed Richard's observations:

The biggest difference at the moment is [ARDs] come along and they don't want to talk to you about your School Opinion Surveys—they talk to you now about a kid they identified in Year 5 who didn't move as far as the other kids between year 3-5 in inferential questioning. So as they've got very - incredibly—precise in their agenda, that's forced us to get precise. And there's nothing wrong with that, that's where we should be working. So I think they're good moves.

A quote from Scott that exemplifies the culture of quantification of education applies here in terms of how data guides supervision of principals. He commented that:

When it comes down to it, [results are] all they want to see. They're not interested in how I'm doing it, they just want to see this number of kids above this certain point, so it's a very numerical system.

According to these performative approaches, provided that principals are meeting system benchmarks and targets they are judged by their supervisors to be effective and, as a result, afforded the freedom to continue working as they see fit. Here, the reconstruction or re-framing of practices around ways of working (Lingard and Sellar 2013) as desired by the system is evident. Principals are left to 'get on with it', as Max said—provided that the ways they are 'getting on with it' result in desirable outcomes for the system as a whole as can be measured and monitored via the data profile. They are thus ostensibly more autonomous, but being governed by the impetus to 'improve' their data profiles, which targets their focus on certain elements of schooling as a result.

Discussing the ways various data profiles are used as part of ARDs' supervisory practices, Richard emphasised the fact that data are used as a tool for reflection and to guide conversations, or direct support; rather than as a punitive tool. Tracy believes that a shift in culture is needed, because 'we need to move away from [teachers and principals] feeling that data is a judgment, and instead move them to realising it's an opportunity for reflection'. She elaborated later that 'as a system, we have to have accountabilities [such as the data profile], but this system is trying to have [data-based accountabilities] be reflection tools. They're not trying to be judgments'. However, another conversation with Tracy suggested that there potentially *is* some judgment to be found about the way principals are using data in their work:

Now if you've got a pattern of [data] being negative, negative, negative, and you're not doing the reflection and seeking the support, well then you're not cut out to be there. You're not meant for the job. And there's going to be a bit of that, I think.

Here, potentially, we see a bigger picture approach to performativity and accountabilities—while the negative data alone is not enough to warrant being seen as 'not meant for the job', a lack of perceived effort in addressing this data may be. In this sense, the re-framing of principals' work (Lingard and Sellar 2013) is evident, where principals are allegedly more autonomous but are being governed by tools like the profile to work in certain ways to align with systemic expectations about how to work with their school data. The notion of governmentality and discipline is evident here, wherein principals' behaviours are being shaped in ways that align with the system imperatives.

## Conclusion

Just as the creation of the Emperor's map set the citizens of the empire onto a path dedicated to cartography, explicit expectations for principals to deliver 'extraordinary and sustained improvement' in their schools, coupled with the emphasis placed on school performance data through the regularly updated data profile has resulted in a shift in practice for the principals in these case studies. Principals' behaviour has changed with an aim towards improving the data contained within the profile. This is where the emperor's map, or the current emphasis on data (via the data profiles), has shifted the focus for some principals towards a targeted agenda focusing on improving these specific sets of data.

Juxtapositions were identified between principals' appreciation of the clarity afforded by the data contained within the profile, and participants' concerns about the impact of a short-term focus on quick-fix solutions. Though the focus on the Emperor's map led the citizens of the empire to ruins, the analogy for the principals in this study ends at a less extreme conclusion. Parallels can be drawn between the all-consuming nature of the map and the significant influence the data profile has had on notions of school improvement in these case studies. A loss of long-term strategic planning and an ostensible decrease in autonomy due to the nature of being governed by the data profile are key impacts of the focus on these particular measures of achievement and improvement. Herein, some of the principals in these case studies have not only changed their practice, but their ideals and beliefs have also shifted over time to align with the system's expectations.

Principals working in these policy conditions are being produced as school leaders who, shaped by implicit and explicit discourses about accountability, performance, and the quantification of education, represent Foucault's notions of discipline and governance. The Emperor's map serves as a cautionary tale of the possible long-term effects of focusing solely on improving these specific data sets to the detriment of other, holistic, pursuits in education that are not so easily quantified and measured.

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