







TECHNICAL REPORT

Accountability, capacity and trust to improve learning outcomes in South Africa:

Technical report: Phase 4 Teacher Survey

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Ehren, M.C.M., Paterson, A., Baxter, J., Mashilo, D.L., Shindler, J., Phundulu, M. and Manyamba, C.



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Corresponding author:

Professor Melanie Ehren: m.c.m.ehren@vu.nl

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Abbreviations

DBE	Department of Basic Education, National
DDD	Data Driven Districts
ESRC	Economic and Social Research Council
HoD	Head of Department
GT	Gauteng Province, South Africa
KZN	KwaZulu-Natal Province, South Africa
Q1	Quintile 1
Q2	Quintile 2
Q3	Quintile 3
Q4	Quintile 4
Q5	Quintile 5
SMT	School Management Team

1 Introduction

This report provides the technical details of the collection and analysis of data from a survey implemented in the third phase of the ESRC-funded study named 'Accountability, capacity and trust to improve learning outcomes in South Africa; a systems approach' (Grant reference ES/P005888/2). The study focused on relations of trust, capacity building and accountability that may impact on learning outcomes in primary schools over time. The survey (completed in November 2021) builds on our earlier case study work and aims to test key findings on a larger scale.

For the survey data collection, we invited school staff¹ to respond to questions related to capacity, trust and accountability relationships with specific items about professionalism, professional accountability and metaphors to describe the school organisation. The latter variable (metaphors) was identified in our case study as an indicator which captures variation in school staff's understanding of school quality and the purpose of schooling. We were interested to learn how these metaphors relate to notions of professionalism, accountability and trust in schools.

Additional secondary data (made available by the two participating provinces) was merged into the survey dataset to understand how variables relate to student performance.

The research questions underpinning this survey are:

Generic:

- 1. How do professionalism, professional accountability, trust, parental engagement, relations between staff and learners, school culture and metaphors for the school organisation vary by school quality, school context and location and teacher background?
- 2. How do professional priorities and trust orientations of staff vary by school quality, school context and location, and teacher background?
- 3. How are these variables related? For example, do we see a more supportive or more performance-oriented culture in schools which have higher levels of professionalism?

Trust, professionalism and professional accountability:

- 4. To what extent is trust a condition for professionalism and professional accountability?
- 5. Who needs to trust whom and to what purpose to support professionalism and professional accountability?
- 6. Do we find different levels of professionalism, trust (culture) and professional accountability in urban/rural schools or schools in different poverty quintiles²?
- 7. Do we find different levels of professionalism, trust (culture) and professional accountability in high versus low performing schools?



¹ 'School staff' refers to teachers and the school management team.

² Nationally, South African public schools are sorted into five groups, or quintiles, based on poverty levels of the communities in which the schools are located. This is done for the purpose of allocating financial resources to schools per quintile. Schools in Quintile 1 cater for the poorest 20% of learners and Quintile 2 schools cater for the next poorest 20% of schools. Schools in Quintile five are the 'least poor'. Government funding targets for poorer quintiles (Quintiles 1, 2 and 3) are higher than for less poor quintiles (Quintiles 4 and 5). Accordingly, schools in Quintile 1, 2 and 3 were declared no-fee schools, while schools in Quintiles 4 and 5 are fee-paying schools (Department of Education, South Africa. (2004).

Metaphors to describe the school organisation:

- 8. Which metaphors do school staff in high and low performing schools in rural and urban areas in South Africa use to refer to their school organisation?
- 9. How are these metaphors related to/informed by the environment and school community³ in which they work (parental engagement and relations in the school)?
- 10. How do these metaphors shape school staff's professionalism and professional accountability?
- 11. How do metaphors vary for staff in low versus high performing schools?

2 Data collection and analysis

2.1 Sampling and responses

Two data sets were used to create the sampling frame and draw the sample, namely, the 2017 South African Annual Snap Survey for Ordinary Schools (Department of Basic Education (DBE) 2017a) and the 2017 South African Schools Masterlist (DBE 2017b). Using Stata 16, the two datasets were prepared by removing any inconsistencies and by keeping variables of interest⁴ across the two datasets. The full lists of schools for Gauteng (GT) and KwaZulu-Natal (KZN), excluding all schools that did not have quintile information (mainly private schools) and/or information on urban/rural status in 2017, were then extracted.

The main purpose of this stage of the study was to survey teachers in Quintile 1 (i.e., the poorest 20% of schools) and Quintile 5 (the least poorest 20%) rural and urban primary schools in Gauteng and KwaZulu-Natal. Originally, in order to ensure a good coverage, a total of 200 schools was to be drawn - 100 schools from each province. However, there were a number of limitations with the data. The limitations are as follows:

Firstly, some schools had to be excluded because they had no contact details. All schools in Gauteng had contact details but in KwaZulu-Natal, 150 schools had to be excluded from the sampling framework due to missing information. Tables 1 and 2 below show the number of schools with and without contact details and email addresses in Gauteng and KwaZulu-Natal respectively. The schools in KwaZulu-Natal that had to be excluded as a result of missing contact and email information were mostly in the poorest three quintiles (Quintiles 1 to 3)



³ The school community is composed of all the people involved in the activities of the school including students, teachers, parents, governing body, administrators, custodial staff, as well as groups, businesses and institutions that are interested in and contributing to the school's welfare.

⁴ This included School name, School Education Management Information System (EMIS) number, province,

Table 1: Number of Schools in 2017 by quintile and urban/rural status in Gauteng

Quintile		All schools		Schools with contact numbers and email addresses				
	Rural	Urban	Total	Rural	Urban	Total		
1	1	17	18	1	17	18		
2	2	19	21	2	19	21		
3	0	19	19	0	19	19		
4	1	43	44	1	43	44		
5	1	138	139	1	138	139		
Total	5	236	241	5	236	241		

Note: Excludes schools with no Quintile and/or urban/rural status information.

Note: There were no schools in GT that did not have a contact number or email address.

Table 2: Number of Schools in 2017 by quintile and urban/rural status in KwaZulu-Natal

Quintile		All schools		Schools with contact numbers and email addresses				
	Rural	Urban	Total	Rural	Urban	Total		
1	175	5	180	108	5	113		
2	164	11	175	106	6	112		
3	54	16	70	40	15	55		
4	6	41	47	6	38	44		
5	4	74	78	3	73	76		
Total	403	147	550	263	137	400		

Note: Excludes schools with no quintile and/or urban/rural status information

Note: 150 schools in KZN had to be excluded as they had no contact number or email address and these were mostly in schools in Quintile 1-3 schools.

Secondly, as can be seen in Tables 1 and 2, there were not enough rural schools in Gauteng; and there were insufficient Quintile 1 schools in urban areas and insufficient Quintile 5 schools in rural areas.

These limitations in the data necessitated a change in the sampling approach. It was decided to include Quintile 2 and Quintile 4 schools in the sample population, with Quintile 2 schools being grouped with Quintile 1 schools and Quintile 4 schools being grouped with Quintile 5 schools. This resulted in a total sampling frame (excluding Quintile 3 schools and schools with no contact or email information) of 567 schools: 222 in Gauteng and 345 in KwaZulu-Natal. It was also decided that, because of the small size of the sampling frame, the full sampling frame would be used. The total sampling frame for each province in Tables 3 and 4 below shows the number of Quintile 1, 2, 4 and 5 schools by rural/urban status in Gauteng and KwaZulu-Natal respectively.

Table 3: Number of schools in the sample frame and number of teachers in those schools in Gauteng

		Ru	ral			Urban				Total			
Quintile	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff	
1	1	16	20.0%	11.5%	17	631	7.8%	7.7%	18	647	8.1%	7.8%	
2	2	57	40.0%	41.0%	19	641	8.8%	7.8%	21	698	9.5%	8.4%	
4	1	37	20%	26.6%	43	1133	19.8%	13.9%	44	1170	19.8%	14.0%	
5	1	29	20%	20.9%	138	5769	63.6%	70.6%	139	5798	62.6%	69.7%	
Total	5	139	100%	100%	217	8174	100%	100%	222	8313	100%	100%	

Table 4: Number of schools in the sample frame and number of teachers in those schools in KwaZulu-Natal

Quintile		Ru	ral		Urban				Total			
Quir	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff
1	108	940	48.4%	38.6%	5	87	4.1%	2.7%	113	1027	32.7%	18.3%
2	106	1278	47.5%	52.5%	6	94	4.9%	3.0%	112	1372	32.5%	24.4%
4	6	81	2.7%	3.3%	38	902	31.1%	28.4%	44	983	12.8%	17.5%
5	3	137	1.3%	5.6%	73	2098	59.8%	65.9%	76	2235	22.0%	39.8%
Total	223	2436	100%	100%	122	3181	100%	100%	345	5617	100%	100%

The principals from each of the schools were contacted by email informing them of the survey and what it was about and requesting teacher contact details for those teachers who were prepared to participate in the survey. Tables 5 and 6 for Gauteng and KwaZulu-Natal below indicate the number of schools and the number of teachers in those schools who indicated they were prepared to participate and provided contact details. A link to the survey form was then sent to these individuals.

Table 5: Gauteng schools and school staff included in the sample

		Ru	ral			Urban				Total			
Quintile	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff	
1	0	0	0.0%	0%	4	133	13.3%	17.9%	4	133	12.9%	17.0%	
2	1	41	100%	100%	2	101	6.7%	13.6%	3	142	9.7%	18.1%	
4	0	0	0%	0%	6	132	20.0%	32.2%	6	132	19.4%	16.8%	
5	0	0	0%	0%	18	377	60.0%	50.8%	18	377	58.0%	48.1%	
Total	1	41	100%	100%	30	743	100%	100%	31	784	100%	100%	

Table 6: KwaZulu-Natal schools and school staff included in the sample

		Ru	ral		Urban				Total			
Quintile	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff	No. schools	No. staff	% schools	% staff
1	16	134	55.3%	34.2%	1	17	5.0%	6.4%	17	151	34.7%	23.0%
2	11	236	37.9%	60.2%	2	28	10.0%	10.6%	13	264	26.6%	40.2%
4	1	6	3.4%	1.5%	7	85	35.0%	32.2%	8	91	16.3%	13.9%
5	1	16	3.4%	4.1%	10	134	50.0%	50.8%	11	150	22.4%	22.9%
Total	29	392	100%	100%	20	264	100%	100%	49	656	100%	100%

Despite teachers agreeing to participate in the survey, the number of responses received was low. In Gauteng, 122 responses were received from 24 schools and in KwaZulu-Natal, 59 responses were received from 22 schools. See Tables 7 and 8 below.

Table 7: Number of survey responses received from Gauteng

	Ru	ral	Url	oan	Total			
Quintile	Number of schools	Number of participating staff	Number of schools	Number of participating staff	Number of schools	Number of staff		
1	-	-	3	13	3	13		
2	1	7	2	11	3	18		
4	-	-	3	15	3	15		
5	-	-	14	76	14	76		
Total	1	7	21	114	24	122		

Table 8: Number of survey responses received from KwaZulu-Natal

	Ru	ıral	Url	ban	Total			
Quintile	Number of schools	Number of participating staff	Number of schools	Number of participating staff	Number of schools	Number of staff		
1	3	6	-	-	3	6		
2	6	13	1	1	7	14		
4	-	-	5	16	5	16		
5	1	6	6	17	7	23		
Total	10	25	12	34	22	59		

2.2 Survey

The survey to measure trust, capacity and accountability built on earlier case studies on trust, capacity and accountability in eight low and high performing primary schools in the same two provinces (see Ehren, Paterson & Baxter, 2020). Prior to being finalised, the survey data collection instrument was piloted in 15 Quintile 3 schools (five in Gauteng and 10 in KwaZulu-Natal) to check whether the instrument was practical and user-friendly, establish clarity and interpretation by respondents and determine whether the instrument would generate useful information. It was sent to school staff in both provinces between August and October 2021 (see survey form Appendix 3).

The survey was administered in an online format which was tested for both desktop and mobile phone completion. Approval for data collection was first requested from the two provincial departments. Upon securing permission in each province, the principals of all the primary schools in each province were requested to invite staff members to participate in the survey (see section 2.1 on sampling above). Staff members who indicated that they were willing to participate provided their mobile phone numbers, which were forwarded to the research project office.

The survey project office sent an SMS to participating staff with a unique link to the survey. In the invitation to participate in the survey, we included a brief explanation (which could also be played as a video) about the purpose of the survey, how data would be used, how the identity of respondents would be protected at all times and that staff could withdraw from the survey at any time. Staff who completed the survey received a voucher for internet access/data as an incentive and enabler for filling in the survey.

2.3 Use of secondary data

In order to answer the research questions mentioned in the Introduction above, we aimed to source and use additional secondary data to understand how the constructs measured in our survey could be related to school performance data.

School performance data was requested from the Gauteng and KwaZulu-Natal Departments of Education. Two waves of school data had been collected by districts in the respective provinces as part of the Data-driven Districts (DDD) Programme⁵ in the years 2021 and 2020. Our intention was to

⁵ In partnership with the DBE, the DDD Programme aims to improve the quality, availability, analysis and use of education data in order to support improvements in learner outcomes (DDD Programme, n.d.)



merge the DDD school performance data with the project dataset of schools. This included: learner and educator attendance data; learner and educator information; and learner, subject and school performance data. Schools were categorised by school performance type (high and low performing schools).

The aim was to understand how the constructs measured in our survey and school context variables are related to school performance data:

- School context (province, quintile, rural-urban and teacher background)
- Teacher professionalism, trust (culture) and professional accountability
- Schools in which teaching staff respondents selected the family metaphor as their best-fit.

2.4 School performance type (low and high performing schools) and distribution of schools by province, quintile, rural-urban

The level of school performance was determined by calculating the mean performance of all schools in the survey that submitted data for Grade 3 and 6 Mathematics and English First Additional Language achievement to the DDD Programme. Those schools that achieved a mean below the overall mean were considered to be low performing and those that achieved above the mean were considered to be high performing. Of the 151 schools, 123 or 85.5% fell into the high performing category and 28 or 18.5% into the low performing category (see Table 9).

School performance by province, as shown in Table 10, indicates that in both Gauteng and KwaZulu-Natal the largest proportion of schools for which information was available was high performing schools (84% and 76.5% respectively). An analysis by Quintiles (see Table 11) suggests that the majority of Quintile 1 (83%), Quintile 3 (100%) and Quintile 5 (94%) schools fell into the high performing category, but the opposite was true for Quintile 2 schools, where the majority fell into the low performing category (70%).

Most of the rural schools (69.2%) fell into the low-performing category while most of the urban schools (92.0%) fell into the high-performing category (see Table 12).

Table 9: Number and proportion of high and low performing schools

School Type	Number	Proportion
High performing	123	81.5%
Low performing	28	18.5%
Total	151	100%

Table 10: Number and proportion of high and low performing schools, by province

Province	High pe	rforming	Low per	forming	Total			
	Number Proportion		Number	Proportion	Number	Proportion		
GT	84	84.0%	16	16.0%	100	100%		
KZN	39	76.5%	12	23.5%	51	100%		
Total	123	81.5%	28	18.5%	151	100%		

Table 11: Number and proportion of high and low performing schools, by quintile

Quintile	High perfo	orming	Low	performing	Total		
	Number	Proportion	Number	Proportion	Number	Proportion	
1	10	83.3%	2	16.7%	12	100%	
2	9 30.0%		21 70.0%		30	100%	
4	26	100.0%	0	0.0%	26	100%	
5	78	94.0%	5	6.0%	83	100%	
Total	123	81.5%	28	18.5%	151	100%	

Table 12: Number and proportion of high and low performing schools, by rural/urban area

Rural/Urban	High per	forming	Low pe	erforming	Total		
	Number	Proportion	Number	Proportion	Number	Proportion	
Rural	8	30.8%	18	69.2%	26	100%	
Urban	115	92.0%	10	8.0%	125	100%	
Total	123	81.5%	28	18.5%	151	100%	

The tables above showing the distribution of schools by level of performance and school context reflect low numbers and proportions in particular categories that could limit confidence in the findings. This is discussed further below

2.5 Data analysis

This section describes the cleaning of the dataset and construction of scales.

2.5.1 Setting 'don't know' and 'prefer not to say' to missing values

For potentially sensitive questions in the survey, the answer options 'don't know' and 'prefer not to say' were included to allow participants to refrain from expressing their view when feeling uncomfortable answering the question, rather than skipping over the question or conforming with

socially appropriate responses. These responses were coded as '99' and '999' and set as missing values for further analysis.

An analysis of responses to these two options indicates that on the following questions, more than 10% of staff responded either 'don't know' or 'prefer not to say'. School staff particularly responded 'don't know' to questions about how poor performance is addressed or when asked about elements of school culture (e.g. relations between staff), while they chose 'preferred not to say' in response to question D25 about relations in the school.

Table 13: Teachers responding 'don't know' or 'prefer not to say'(n=181)

Question		Teachers responding 'don't know' or 'prefer not to say' (number and percentage)							
	Don't	know	Prefer n	ot to say					
	n	%	n	%					
C20_In my view, teachers in a school are responsible for the quality of each other's work	8	4.20	6	3.20					
C21_In my view, teachers should be the ones who decide on what good teaching looks like	14	7.40	2	1.10					
D25_Relations among teachers in the school are good	6	3.20	10	5.30					
D26_Relations between SMT and teachers in the school are good	6	3.20	7	3.70					
D28_Staff socialise with each other outside of the school day	28	14.70	9	4.70					
D30_If parents have a complaint about the teaching, they will go directly to the principal rather than to the teacher	11	5.80	12	6.30					
E32_When learners are not learning, their teacher would be reprimanded by his/her superior	14	7.40	10	5.30					
E34_When learners are not learning, a colleague would tell the responsible teacher	14	7.40	9	4.70					
E35_When learners are not learning, the principal would tell the teacher to improve	12	6.30	8	4.20					
E36_When learners are performing well academically, their teacher would receive a pay rise/bonus	16	8.40	9	4.70					

2.5.2 Rank order and tick top 3 items

The survey included a set of questions which asked respondents to either rank order statements or to choose a top 3. The relevant question are as follows:

- C10: Please rank order the following statements according to importance for you in your current role, where 1 is most important and 6 is least important.
- E37: You have been asked to nominate a teacher for a financial bonus. Who would you choose from the teachers described below? Please indicate your top three (out of eight options), where 1 = highest priority and 3 = least priority.
- F1: We present you with some (four) generic statements about your school. This will allow us to describe the differences between schools in a more generic, metaphorical manner.



- Please read the brief descriptions below and rank order them, where 1 = this description fits my school best and 4 = this description does not describe my school well.
- Item D31 asked participants to tick three descriptions from a set of 10 which describe a teacher in their school they would trust. Each statement was converted into a separate variable with a binary value: 0 = not selected, 1 = selected.

2.5.3 Constructs measured with scales consisting of corresponding items

From the responses given to questions in the survey, scales were constructed to measure seven constructs, namely:

- 1. Professionalism (10 items), and Professionalism Reduced Scale RS (7 items)
- 2. Professional accountability
- 3. Trust culture
- 4. Parental engagement
- 5. Relations in the school
- 6. A performance-oriented
- 7. A supportive culture

The scales 6 and 7 in the list above overlap with scale 2 'professional accountability' and were not used in any of the analyses for the Factsheets. We also constructed two variables for professionalism, where a reduced scale of seven items (with a lower reliability coefficient) was used in further analysis to test for specific relations between trust items and scales; the first, wider professionalism scale of 10 items incorporated two items that measure trust; these items could therefore not be used for checking the relationship between trust and professionalism. Most of the constructs in Table 10 below have good reliability, apart from the 'professional accountability' and 'performance-oriented', where the reliability is questionable. The 'professional accountability' and 'performance-oriented' constructs were still included in further analysis, but conclusions which reference these constructs need to be interpreted with caution as a result. Table 10 includes the constructs with corresponding items, reliability coefficients, number of respondents, means and standard deviations. All items included a 4-point scale where a higher score would indicate more (positive) agreement. All constructs have responses closer to the mean (a small standard deviation), where the mean indicates agreement ('3').

For the purpose of creating constructs and running inferentials, we excluded 'don't know' and 'prefer not to answer' for each item to calculate means and standard deviations for each construct, as these might have skewed the results. These should not be interpreted as average scores, but rather as the extent of agreement or disagreement with the relative priority or importance of each item, as respondents were forced to choose between options in the original rank order item.

Table 14: Constructs with corresponding items (4-point scale)

Construct	Items included in the scale	Reliability coefficient	N	Average	SD
Professionalism (10 items)	C11 In my view, teaching requires expert knowledge C15 In my view, teachers can only do their job when they are trusted by their colleagues	0.75	180	3.22	0.44
	C16 In my view, teachers can only do their job when				

Construct	Items included in the scale	Reliability coefficient	N	Average	SD
	they are trusted by their HoD and principal				
	C17 In my view, teaching is a very complex and difficult job that only a professional with expert knowledge and skill can perform				
	C18 In my view, teaching is a service that takes care of learners with a professional insight				
	C19 In my view, teaching is acknowledged as a unique knowledge and skill that only a teacher can perform				
	C20 In my view, teachers in a school are responsible for the quality of each other's work				
	C21 In my view, teachers should be the ones who decide on what good teaching looks like				
	C22 In my view, teaching is a calling for life				
	C23 In my view, good teachers express their opinion about the quality of the school freely				
Professionalism	C11 In my view, teaching requires expert knowledge	0.66	180	3.22	0.44
(RS*): reduced scale (7 items)	C14 It's better when the teacher –not the student decides what activities need to be done				
	C17 In my view, teaching is a very complex and difficult job that only a professional with expert knowledge and skill can perform				
	C18 In my view, teaching is a service that takes care of learners with a professional insight				
	C19 In my view, teaching is acknowledged as a unique knowledge and skill that only a teacher can perform				
	C21 In my view, teachers should be the ones who decide on what good teaching looks like				
	C22 In my view, teaching is a calling for life				
Professional accountability	C20 In my view, teachers in a school are responsible for the quality of each other's work	0.46	180	3.01	0.45
(5 items)	C23 In my view, good teachers express their opinion about the quality of the school freely				
	E33 When learners are not learning, their teacher would receive support to improve his/her teaching				
	E34 When learners are not learning, a colleague would tell the responsible teacher				
	E35 When learners are not learning, the principal would tell the teacher to improve				
Trust culture (4 items)	D24 Relations between school staff and learners in the school are good	0.81	177	3.35	0.49
	D25 Relations among teachers in the school are good				
	D26 Relations between SMT and teachers in the school are good				



Construct	Items included in the scale	Reliability coefficient	N	Average	SD
	D29 Staff help each other out when need be				
Parental engagement (5	B1 Parents/caregivers of the learners in this school supervise their homework	0.75	181	2.76	0.54
items)	B2 Parents/caregivers of the learners in this school have the knowledge and skills to help them complete their homework				
	B3 Parents/caregivers of the learners in this school value education				
	B4 Parents feel part of the school community				
	B6 Most parents/caregivers have sufficient income to provide for basic needs				
Relations (7 items)	D24 Relations between school staff and learners in the school are good	0.74	177	3.20	0.40
	D25 Relations among teachers in the school are good				
	D26 Relations between SMT and teachers in the school are good				
	D27 Relations between parents and school staff are good				
	D28 Staff socialize with each other outside of the school day				
	D29 Staff help each other out when need be				
	D30 If parents have a complaint about the teaching, they will go directly to the principal rather than to the teacher (recoded)				
Performance oriented	E32 When learners are not learning, their teacher would be reprimanded by his/her superior	0.52	179	2.43	0.61
culture (5 items)	E33 When learners are not learning, their teacher would receive support to improve his/her teaching				
	E34 When learners are not learning, a colleague would tell the responsible teacher				
	E35 When learners are not learning, the principal would tell the teacher to improve				
	E36 When learners are performing well academically, their teacher would receive a pay rise/bonus				
Supportive school culture	D26 Relations between SMT and teachers in the school are good	0.64	179	3.33	0.53
(3 items)	D29 Staff help each other out when need be				
	E33 When learners are not learning, their teacher would receive support to improve his/her teaching				

^{*}RS =Reduced scale



3 Response patterns by school context and teacher background

3.1 Priorities by school context and teacher background

Table 15 provides a summary overview of the distribution of responses to items relating to the priorities with regard to the purpose, role and responsibilities of school staff in their current role. Respondents were asked to rate statements in order of importance to them from one to six, with one being the most important and six the least important. Table 16 that follows provides a further overview of responses.

Findings in these tables indicate that in both provinces, the largest number of staff (48.6%) considered 'ensuring learners are fed and healthy' as their most or second most important responsibility for their role, followed by 44,2% who indicated that 'ensuring learners learn reading writing and mathematics' was their most important responsibility. It is concerning that school staff who are employed to ensure that learners learn the contents of the curriculum seemed to be more concerned about learners being fed and healthy. This could be an indication of the poverty in the surrounding areas of the schools as well as a failure of the National School Nutrition Programme. However, a further 37.6% of schools staff rated 'ensuring learners learn reading writing and mathematics' in the lower three categories of importance. This outcome could be interpreted in different ways: that teachers consider that their personal accountability for the health of learners overrules accountability for their mandated role as teachers. In this case it would be of interest to identify their highest priority.

These results reveal that none of the priorities from which teachers could choose was selected by a majority of teachers. This implies that teachers differed regarding what they believed they should prioritise in their day to day professional roles, and reveals a lack of unanimity among teachers on their main priority, which may weaken their impact in schools. On the other hand, it may indicate that teachers tend to balance their time and effort between more than one priority at a given time and that this balance can change over time and depending on circumstances. For example, data in Table 16 below shows that in rural KwaZulu-Natal schools, social cohesion 'Ensuring learners become good and responsible citizens' (32.3%) and health and nutrition 'Ensuring learners are fed and healthy' (29.0%) were ranked as high priorities.

The largest proportion of school staff considered 'ensuring learners behave well in school' (64%) and 'ensuring learners become good and responsible citizens' (58%) as second least or least important of their roles. Yet learner discipline in schools is understood to be a serious problem that detracts from learning time and learners' attention to their work. This could reflect that teachers either feel overwhelmed by their situation or find efforts to encourage improvements in behaviour to be fruitless and no longer feel accountable for their role in creating a sustainable learning environment.



Table 15: Items that elicit the priorities of school staff (question C10)

	learne fed	iring ers are and Ithy	lear develo	iring ners p social ills	emot well-b	ng the ional eing of ners	Ensuring learners learn reading, writing and mathematics		lear behave	iring ners well in ool	Ensu lear becom ar respo citiz	ners e good nd nsible
ı	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.
1: Most NB	55	30.4%	11	6.1%	33	18.2%	49	27.1%	2	1.1%	29	16.0%
2	34	18.2%	44	24.3%	43	23%	31	17.1%	14	7.7%	14	7.7%
3	31	17.1%	37	20.4%	50	27.6%	31	17.1%	15	8.3%	15	8.3%
4	20	11.0%	38	21.0%	30	16.6%	43	23.8%	32	17.7%	16	8.8%
5	18	9.9%	31	17.1%	18	9.9%	18	9.9%	60	33.1%	34	18.8%
6: Least NB	22	12.2%	18	9.9%	5	2.8%	7	3.9%	56	30.9%	71	39.2%
Total	179	98.8%	179	98.8%	179	98.8%	179	98.8%	179	98.8%	179	98.9%

A comparison by province, urban/rural context, Quintile and teacher background shown in Table 16, suggests the following:

- Priorities varied by province and across the urban versus rural context. The largest proportion of staff in Gauteng (32.2%) chose 'Ensuring learners learn reading, writing and mathematics' as their most important priority, followed by 28.9% who chose 'Ensuring learners are fed and healthy'. In KwaZulu-Natal, on the other hand, the largest proportion of staff (34.5%) chose 'Ensuring learners are fed and healthy', followed by 22.4% who chose 'Ensuring learners become good and responsible citizens'. Just 17.2% of staff in KwaZulu-Natal chose 'Ensuring learners learn reading, writing and mathematics' as their most important priority.
- In rural areas 'Ensuring learners become good and responsible citizens' was chosen by the largest share of school staff (32.3%) as their most important priority, followed by 29.0% who chose 'Ensuring learners are fed and healthy' as their most important priority. In urban areas, the largest share of school staff (31.1%) chose 'Ensuring learners are fed and healthy' as their most important priority followed by 29.1% who chose 'Ensuring learners learn reading, writing and mathematics'. 'Ensuring learners learn reading, writing and mathematics' was chosen by just 19.4% of school staff in KwaZulu-Natal as their most important priority. Response rates, however, varied considerably by urban versus rural context so these findings need to be interpreted with caution (see Appendix 1 for the number of responses).
- Across quintiles, 'Ensuring learners are fed and healthy' was chosen as the most important priority by the largest proportion of school staff in Quintile 1 (36.8%) and Quintile 4 (45.2%) schools, while 'Ensuring learners learn reading, writing and mathematics' was seen as the most important priority for Quintile 5 school staff (28.6%), followed by 'Ensuring learners are fed and healthy' (26.5%). For Quintile 2 schools, the largest share of school staff chose both

- 'Ensuring learners learn reading, writing and mathematics' and 'Ensuring learners learn reading, writing and mathematics' (25.8% respectively). There were few responses from staff working in Quintile 1 and 2 schools and this should be kept in mind when interpreting the results.
- School staff were mostly female and from the teacher category. For female respondents,
 'Ensuring learners are fed and healthy' and 'Ensuring learners learn reading writing and
 mathematics' were considered to be the most important priority for an equal proportion of
 respondents (28.5% respectively), while for male respondents, 41.2% considered 'Ensuring
 learners are fed and healthy' most important, followed by just 23.5% who considered
 'Ensuring learners learn reading, writing and mathematics' as their most important priority.
- Priorities varied according to the professional role held by school staff. The largest share of teachers and principals chose 'Ensuring learners are fed and healthy' as their most important priority (31.9% and 35.0% respectively) while the largest share of HoD's (44.4%) indicated that 'Ensuring learners learn reading writing and mathematics' was their most important priority and 30% of deputy principals indicated that 'Ensuring learners become good and responsible citizens' is their most important priority. Again, the numbers for some leadership categories were quite small, which means that comparisons between roles need to be interpreted with caution.
- Priorities also varied among school staff from different population groups. Among Black African staff, the largest share (29.5%) indicated that 'Ensuring learners learn reading, writing and mathematics' was their most important priority, followed closely by 'Ensuring learners are fed and healthy' (chosen by 27.3%). Among Indian/Asian school staff, the largest share (44.4%) indicated that their most important priority was 'Ensuring learners are fed and healthy', followed by 22.2% who indicated that 'Ensuring learners become good and responsible citizens' was their most important priority. Among White staff, 'Ensuring learners learn reading, writing and mathematics' was chosen by 34% of White staff as their most important priority, followed by 28% who chose 'Ensuring learners are fed and healthy' as their most important priority. There were no meaningful differences for Coloured school staff and/or other population groups as the numbers were too small.



Table 16: Items chosen by school staff as the most important priority, by province, quintile, gender, role and population group (Question C10)

	learne	suring rs are fed healthy	Ensuring develop ski	social	Ensuri emotior being of	al well-	Ensuring learn re writin mathe	eading, g and	Ensuring behave sch	well in	Ensuring become g respon	good and nsible
	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.
Province												
GT	35	28.9%	5	4.1%	24	19.8%	39	32.2%	2	1.7%	16	13.2%
KZN	20	34.5%	6	10.3%	9	15.5%	10	17.2%	0	0.0%	13	22.4%
Quintile												
1	7 36.8% 1 5.3% 1						6	31.6%	0	0.0%	4	21.1%
2	8	25.8%	3	9.7%	5	16.1%	8	25.8%	2	6.5%	5	16.1%
4	14	45.2%	3	9.7%	3	9.7%	7	22.6%	0	0.0%	4	12.9%
5	26	26.5%	4	4.1%	24	24.5%	28	28.6%	0	0.0%	16	16.3%
Rural/Urba	an											
Rural	9	29.0%	3	9.7%	3	9.7%	6	19.4%	0	0.0%	10	32.3%
Urban	46	31.1%	8	5.4%	30	20.3%	43	29.1%	2	1.4%	19	12.8%
Gender												
Male	14	41.2%	3	8.8%	4	11.8%	8	23.5%	1	2.9%	4	11.8%
Female	41	28.5%	8	5.6%	28	19.4%	41	28.5%	1	0.7%	25	17.4%
Population	group											
Black African	24	27.3%	8	9.1%	16	18.2%	26	29.5%	2	2.3%	12	13.6%
Coloured	1	25.0%	0	0.0%	1	25.0%	1	25.0%	0	0.0%	1	25.0%
Indian or Asian	16	44.4%	3	8.3%	5	13.9%	4	11.1%	0	0.0%	8	22.2%
White	14	28.0%	0	0.0%	11	22.0%	17	34.0%	0	0.0%	8	16.0%
Other	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Profession	al role											
Teacher	38	31.9%	8	6.7%	22	18.5%	30	25.2%	1	0.8%	20	16.8%
HoD	9	33.3%	0	0.0%	3	11.1%	12	44.4%	0	0.0%	3	11.1%
Deputy Principal	1	10.0%	2	20.0%	2	20.0%	2	20.0%	0	0.0%	3	30.0%
Principal	7	35.0%	1	5.0%	5	25.0%	4	20.0%	0	0.0%	3	15.0%

3.2 Trust orientations by school context and teacher background

Participants were asked to choose three statements which best describe another teacher in the school who they would trust. The results are shown in Table 17 below.

The first row in Table 17 shows the overall results and indicates that just over half of the staff (51.6%) chose 'is reliable' as a characteristic of someone they would trust in the school, followed by 28.9% choosing 'is fair'. Very few respondents (n=4) would choose a teacher who 'will do me a favour if I do one for him/her' as someone they could trust.

Trust orientations did not seem to vary by province. While the majority of females (50.0%) and males (57.1%) in the survey would choose 'is reliable' as a characteristic of a teacher they would trust in the school, for males this was followed by 'is caring' (34.3%) and then by 'will not lie to me' (31.4%), while for females this was followed by 'means well and tries to do the right thing' (44.2%) and then 'is fair' (31.8%). The low number of respondents for each trust orientation will likely have impacted this outcome.

With regard to population groups (Black African, Indian/Asian, White) in relation to trust, it would seem that trust orientation differed very slightly according to race group. For Black/African and White staff, the largest proportion (45.9% and 68% respectively) would choose 'is reliable' as a characteristic of who they would trust in the school. For Indian staff, the largest proportion (45.9%) would choose 'means well and tries to do the right thing'. Among Indian staff, the second largest proportion (41.8%) would choose 'is reliable', while Black African staff, the second largest group would choose 'means well and tries to do the right thing' (41.8%); and for Whites this applied to 'is fair' and 'has a good reputation with colleagues' (both chosen by 35.1% of White respondents).

This analysis does not include a comparison by urban/rural, quintile, professional role and Coloured people/other population groups given the low number of responses in some of the trust orientation categories. For the number of responses received, see Appendix 1.



Table 17: Trust orientations by quintile and population group (Question D31)

		will not lie to me	is good at his/her job/work	means well and tries to do the right thing	will not deceive me	thinks that the same things are important as I do	is reliable	is fair	has a good reputation with colleagues	is caring	will do me a favour if I do one for him/her
Totals ⁶	Frequency and percentage selected	43 (22.8%)	18 (9.9%)	78 (41.1%)	23 (12.1%)	33 (17.4%)	98 (51.6%)	55 (28.9%)	38 (20.0%)	49 (25.8%)	4 (2.1%)
Province											
Gauteng	Count	30	17	50	14	19	69	35	28	31	3
	% within Province	23.8%	13.5%	39.7%	11.1%	15.1%	54.8%	27.8%	22.2%	24.6%	2.4%
KZN	Count	13	6	28	9	14	29	20	10	18	1
	% within Province	21.0%	9.7%	43.8%	14.1%	21.9%	45.3%	31.3%	15.6%	28.1%	1.6%
Gender						•					
Male	Count	11	4	10	8	6	20	6	6	12	0
	% within Gender	31.4%	11.4%	28.6%	22.9%	17.1%	57.1%	17.1%	17.1%	34.3%	0.0%
Female	Count	32	19	68	15	26	77	49	32	37	3
	% within Gender	21.1%	12.5%	44.2%	9.7%	16.9%	50.0%	31.8%	20.8%	24.0%	1.9%
Population	group										
Black African	Count	20	16	41	11	13	45	17	17	28	3
	% within Population	20.6%	16.5%	41.8%	11.2%	13.3%	45.9%	17.3%	17.3%	28.6%	3.1%

⁶ Respondents could choose three options which best describe 'another teacher in the school who you would trust'; the total for each statement in the table (e.g. 'will not lie to me') is the sum of how often the option was chosen by respondents and can add up to 181 in case everyone ticked the option.

		will not lie to me	is good at his/her job/work	means well and tries to do the right thing	will not deceive me	thinks that the same things are important as I do	is reliable	is fair	has a good reputation with colleagues	is caring	will do me a favour if I do one for him/her
	group										
Indian or	Count	9	5	17	5	8	15	13	13	7	0
Asian											
	% within Population group	25.0%	13.9%	45.9%	13.5%	21.6%	40.5%	35.1%	35.1%	18.9%	0.0%
White	Count	14	2	17	7	11	34	25	25	13	0
	% within Population group	28.0%	4.0%	34.0%	14.0%	22.0%	68.0%	50.0%	50.0%	26.0%	0.0%

3.3 Teacher performance pay by school context and teacher background

Question E37 asked teachers to order the top three out of eight statements relating to who they would nominate for a financial bonus. Table 18 provides an overview of the percentage of teachers that chose each statement as their first, second or third priority. Priorities did not vary much by province, quintile, urban/rural, gender, role or population group (also because of low response rates) and tables for these are therefore not included.

An analysis of the highest priority for school staff indicates that 'A teacher who always works extra hours' is given highest priority for a financial bonus by the majority of school staff (43.6%). Thereafter, 'A teacher who gets awards as best teacher at the school every year', 'A teacher who is always asked for advice by other teachers', and 'A teacher whose learners have high test scores' featured, with 13.3%, 12.7% and 12.7% of responses respectively, while union membership was prioritised by very few respondents.

Table 18: The top three highest priorities that school staff would nominate a teacher for a financial bonus (Question E37)

	Highes	t priority	Second hig	ghest priority	Third highest priority			
Which teacher would you nominate for a financial bonus?	Number	Proportion	Number	Proportion	Number	Proportion		
A senior teacher who has been in the school longest	8	4.4%	7	3.9%	22	12.2%		
A teacher who always works extra hours	79	43.6%	47	26.0%	24	13.3%		
A teacher who gets awards as best teacher at the school every year	24	13.3%	10	5.5%	17	9.4%		
A teacher who is a member of a teacher union and who contributes to the activities of the union	1	0.6%	4	2.2%	2	1.1%		
A teacher who is always asked for advice by other teachers	23	12.7%	20	11.0%	37	20.4%		
A teacher who never receives parental complaints	4	2.2%	16	8.8%	23	12.7%		
A teacher who takes on extra administrative/management tasks	17	9.4%	47	26.0%	30	16.6%		
A teacher whose learners have high test scores	23	12.7%	28	15.5%	24	13.3%		
Missing	2	1.1%	2	1.1%	2	1.1%		
Total	181	100%	181	100%	181	100%		

3.4 Metaphors to describe school organisation

Question F1 in the survey asked respondents to rank in order four metaphors according to how well they describe their own school. Table 19 shows the number and proportion of respondents' first choice, second, third and fourth choice metaphor. The first choice metaphor is the metaphor that was chosen as the best fit for their school. The family metaphor was chosen most frequently as the description which fits the school best, with very few respondents indicating 'war zone' as a metaphor for their school. The hospital metaphor comes out as the second best description, while the factory metaphor was prioritised as 'best fitting' by almost 18% of respondents.

Table 19: Metaphors which fit the school best (Question F1 transformed into separate items with a 4-point scale)

	Fa	mily	Fa	ctory	Но	spital	Warzone			
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion		
Fits best	93	51.4%	32	16.8%	49	26.8%	5	2.6%		
Fits	41	22.7%	69	38.1%	64	35.4%	5	2.6%		
Minor fit	41	21.6%	70	38.7%	53	27.9%	15	8.9%		
Does not fit	4	2.1%	8	4.7%	13	7.9%	160	84.2%		
Total	179	98.9%	179	98.9%	179	98.9%	179	98.4%		
Missing	2	1.1%	2	1.1%	2	1.1%	3	1.6%		
Total	181	100%	181	100%	181	100%	181	100%		

A cross-tabulation of responses by school context - province, urban-rural, quintile and teacher background (gender, role, population group) – is, presented in Table 20, which indicates that there was some limited variation in choice of metaphor between the two provinces, between rural and urban area, gender, and respondent's role as follows:

- More teaching staff from Gauteng (28.8%) rated the hospital metaphor as best fit than did teaching staff in KwaZulu-Natal (23.8%).
- More teaching staff in urban areas(29.6%) rated the hospital metaphor as best fit than did staff in rural areas (16.7%).
- More male teaching staff (65.7%) rated the family metaphor as best fit than did female staff
- More female teaching staff (29.6%) rated the hospital metaphor as best fit than did male staff (16.7%).
- More deputy principals (81.8%) and principals (60.9%) rated the family metaphor as best fit than did teachers (48.8%) and HoDs (50.0%).

Table 20: Best fitting metaphor by province, urban/rural, quintile, gender, role, and population group (Question F1)

		Family metaphor					Factory n	netaphor		Hospital metaphor				Warzone metaphor			
Province		fits best	2	3	does not fit	fits best	2	3	does not fit	fits best	2	3	does not fit	fits best	2	3	does not fit
GT	Count	64	28	27	2	20	48	47	6	34	41	40	6	3	4	7	107
	% within Province	68.8%	68.3%	65.9%	50.0%	62.5%	69.6%	67.1%	75.0%	69.4%	64.1%	75.5%	46.2%	60.0%	80.0%	46.7%	69.5%
KZN	Count	29	13	14	2	12	21	23	2	15	23	13	7	2	1	8	47
	% within Province	31.2%	31.7%	34.1%	50.0%	37.5%	30.4%	32.9%	25.0%	30.6%	35.9%	24.5%	53.8%	40.0%	20.0%	53.3%	30.5%
Urban/ru	ral	· · · · · · · · · · · · · · · · · · ·	'	'													
Rural	Count	15	9	6	1	9	12	10	0	5	8	11	7	2	2	4	23
	% within urban/ rural	16.1%	22.0%	14.6%	25.0%	28.1%	17.4%	14.3%	0.0%	10.2%	12.5%	20.8%	53.8%	40.0%	40.0%	26.7%	14.9%
Urban	Count	78	32	35	3	23	57	60	8	44	56	42	6	3	3	11	131
	% within urban/ rural	83.9%	78.0%	85.4%	75.0%	71.9%	82.6%	85.7%	100.0%	89.8%	87.5%	79.2%	46.2%	60.0%	60.0%	73.3%	85.1%
Quintile																	
1	Count	11	4	3	1	2	7	9	1	5	8	6	0	1	0	1	17
	% within Quintile	11.8%	9.8%	7.3%	25.0%	6.3%	10.1%	12.9%	12.5%	10.2%	12.5%	11.3%	0.0%	20.0%	0.0%	6.7%	11.0%
2	Count	15	8	8	0	11	12	8	0	5	9	12	5	0	2	3	26
	% within Quintile	16.1%	19.5%	19.5%	0.0%	34.4%	17.4%	11.4%	0.0%	10.2%	14.1%	22.6%	38.5%	0.0%	40.0%	20.0%	16.9%
4	Count	13	6	11	1	5	14	8	4	11	11	7	2	2	0	5	24
	% within Quintile	14.0%	14.6%	26.8%	25.0%	15.6%	20.3%	11.4%	50.0%	22.4%	17.2%	13.2%	15.4%	40.0%	0.0%	33.3%	15.6%
5	Count	54	23	19	2	14	36	45	3	28	36	28	6	2	3	6	87

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		Family metaphor				Factory metaphor				Hospital metaphor				Warzone metaphor			
Province		fits best	2	3	does not fit	fits best	2	3	does not fit	fits best	2	3	does not fit	fits best	2	3	does not fit
	% within Quintile	58.1%	56.1%	46.3%	50.0%	43.8%	52.2%	64.3%	37.5%	57.1%	56.3%	52.8%	46.2%	40.0%	60.0%	40.0%	56.5%
Gender																	
Male	Count	22	7	4	1	9	12	12	1	3	14	14	3	0	1	4	29
	% within Gender	23.7%	17.1%	9.8%	25.0%	28.1%	17.4%	17.1%	12.5%	6.1%	21.9%	26.4%	23.1%	0.0%	20.0%	26.7%	18.8%
Female	Count	71	34	36	3	23	57	58	6	45	50	39	10	5	3	11	125
	% within Gender	76.3%	82.9%	87.8%	75.0%	71.9%	82.6%	82.9%	75.0%	91.8%	78.1%	73.6%	76.9%	100.0%	60.0%	73.3%	81.2%
Role		•								-				<u> </u>			
Teacher	Count	57	28	32	2	25	52	37	5	35	35	40	9	2	4	10	103
	% within Role	61.3%	68.3%	78.0%	50.0%	78.1%	75.4%	52.9%	62.5%	71.4%	54.7%	75.5%	69.2%	40.0%	80.0%	66.7%	66.9%
HoD	Count	13	8	5	1	0	7	18	2	11	12	2	2	3	0	2	22
	% within Role	14.0%	19.5%	12.2%	25.0%	0.0%	10.1%	25.7%	25.0%	22.4%	18.8%	3.8%	15.4%	60.0%	0.0%	13.3%	14.3%
Deputy principal	Count	9	0	1	0	1	3	5	1	0	7	2	1	0	0	2	8
	% within Role	9.7%	0.0%	2.4%	0.0%	3.1%	4.3%	7.1%	12.5%	0.0%	10.9%	3.8%	7.7%	0.0%	0.0%	13.3%	5.2%
Principal	Count	12	5	2	1	6	5	9	0	2	9	8	1	0	1	1	18
	% within Role	12.9%	12.2%	4.9%	25.0%	18.8%	7.2%	12.9%	0.0%	4.1%	14.1%	15.1%	7.7%	0.0%	20.0%	6.7%	11.7%
Populatio	n group ('Colo	oured' and 'd	other' not	included b	ecause of t	few respon	ses)				,						
Black African	Count	48	20	19	1	18	36	30	4	19	29	32	8	3	3	7	75

	Family metaphor			Factory metaphor				Hospital metaphor				Warzone metaphor					
Province		fits best	2	3	does not fit	fits best	2	3	does not fit	fits best	2	3	does not fit	fits best	2	3	does not fit
	% within Population group	51.6%	48.8%	46.3%	25.0%	56.3%	52.2%	42.9%	50.0%	38.8%	45.3%	60.4%	61.5%	60.0%	60.0%	46.7%	48.7%
Indian or Asian	Count	16	8	10	2	8	13	13	2	12	15	7	2	0	0	6	30
	% within Population group	17.2%	19.5%	24.4%	50.0%	25.0%	18.8%	18.6%	25.0%	24.5%	23.4%	13.2%	15.4%	0.0%	0.0%	40.0%	19.5%
White	Count	27	12	10	1	6	19	25	0	15	18	14	3	2	1	1	46
	% within Population group	29.0%	29.3%	24.4%	25.0%	18.8%	27.5%	35.7%	0.0%	30.6%	28.1%	26.4%	23.1%	40.0%	20.0%	6.7%	29.9%

3.5 Professionalism, parental engagement, relations, and school culture

Finally, we disaggregate responses to questions about 'professionalism', 'parental engagement', 'relations', performance-oriented culture and 'supportive school culture' by 'school background' and 'teacher background'. Findings shown in Table 21 suggest that responses to questions that aimed to elicit information on these five main constructs of the study varied little by province, urban/rural, school quintile, gender, population group or teaching qualification. Items about 'professionalism' and 'relations' were rated higher overall, with responses to 'parental engagement' and 'performance-oriented culture' being rated somewhat lower.

Some comparative observations include:

- Differences between the means of participants at the provincial level were all very small except for the 'performance-oriented culture' construct, where the mean for Gauteng participants was higher than for KwaZulu-Natal participants.
- Participants in rural schools had a higher mean than urban school participants on all five constructs although the differences were relatively small.
- Female participants had a higher mean than male participants for 'professionalism' 'parental engagement' and 'relations', whereas male teachers had higher means for 'performance oriented culture' and 'supportive school culture'
- Participants in Quintile 5 schools had a higher mean than those in Quintile 1 schools, except for 'performance oriented culture', where Quintile 1 schools had a higher mean.



Table 21: Averages and standard deviations of professionalism, parental engagement, relations, and supportive school culture by school context and teachers' biographic information

		Professionalism		Parental engagement			Relations			Performance-oriented culture			Supportive school culture			
		N	Av.	SD	N	Av.	SD	N	Av.	SD	N	Av.	SD	N	Av.	SD
Province	GT	103	3.24	0.42	87	2.71	0.68	85	3.19	0.43	88	2.66	0.51	107	3.31	0.55
	KZN	55	3.21	0.49	48	2.78	0.37	44	3.19	0.45	48	2.48	0.43	60	3.34	0.47
Urban/rural	Urban	30	3.12	0.48	23	2.53	0.49	26	3.08	0.42	27	2.58	0.40	35	3.27	0.42
	Rural	128	3.25	0.43	112	2.78	0.60	103	3.22	0.44	109	2.60	0.51	132	3.34	0.54
Quintile	1	16	2.99	0.39	13	2.38	0.60	9	2.79	0.56	11	2.60	0.43	17	3.08	0.65
	2	26	3.04	0.41	19	2.41	0.41	22	3.25	0.39	20	2.83	0.33	29	3.39	0.47
	4	26	3.27	0.49	24	2.53	0.63	20	3.24	0.46	21	2.61	0.59	27	3.25	0.64
	5	81	3.33	0.41	72	2.97	0.53	70	3.20	0.43	76	2.53	0.51	85	3.38	0.46
Gender	Male	32	3.21	0.46	33	2.70	0.50	26	3.14	0.38	29	2.81	0.36	33	3.44	0.41
	Female	125	3.23	0.44	101	2.75	0.62	102	3.21	0.45	106	2.54	0.51	133	3.30	0.54
Role	Teacher	97	3.23	0.44	76	2.72	0.63	75	3.19	0.46	79	2.55	0.47	106	3.25	0.54
	HoD	24	3.38	0.43	23	2.76	0.65	21	3.00	0.44	23	2.50	0.58	26	3.24	0.49
	Deputy Principal	10	3.04	0.33	11	2.85	0.52	10	3.19	0.35	9	2.78	0.48	9	3.52	0.41
	Principal	24	3.18	0.50	23	2.69	0.49	21	3.38	0.36	24	2.76	0.43	24	3.69	0.32
Population	Black African	76	3.08	0.42	63	2.42	0.60	57	3.12	0.45	62	2.67	0.43	84	3.21	0.52

			Professionalism			Parental engagement			Relations			Performance-oriented culture			Supportive school culture		
		N	Av.	SD	N	Av.	SD	N	Av.	SD	N	Av.	SD	N	Av.	SD	
group	Coloured	3	3.63	0.40	3	2.67	0.81	2	3.14	1,21	2	2.20	0.85	3	3.33	0.67	
	Indian or Asian	32	3.39	0.45	29	2.86	0.35	27	3.33	0.43	28	2.47	0.49	34	3.45	0.54	
	White	46	3.35	0.41	39	3.15	0.41	43	3.20	0.38	43	2.60	0.55	45	3.45	0.44	
	Other	1	2.90		1	2.80		57	3.12	0.45	1	2.60		1	3.00		
Teaching qualification	Yes	152	3.23	0.44	130	2.72	0.59	124	3.19	0.44	132	2.60	0.48	161	3.33	0.52	
quaation	No	5	3.14	0.53	5	3.20	0.47	5	3.23	0.33	4	2.50	0.84	5	3.40	0.60	

4 Correlations between scales and items

4.1 Correlations between professionalism, parental engagement, relations and school culture

Correlations between the constructs of professionalism, parental engagement, relations and school culture were calculated in order to understand how these variables are related. We are particularly interested in the relation between professionalism and school culture (supportive or performance-oriented culture) because both have potential to contribute towards learner performance.

Table 22 shows that there was no relation between professionalism and a supportive culture, but there was a significant relation between professionalism and a performance-oriented culture. However, where school staff confirmed a supportive school culture, they also confirmed strong relations in the school and between staff and parents as well as a performance-oriented culture. Furthermore, we found a moderate size significant correlation (r=0.35**) between relations and parental engagement. We also found a low but significant correlation between relations and a performance-oriented school culture.

Table 22: Correlations between main constructs

	Professionalism	Parental engagement	Relation S	Performance oriented culture	Supportive school culture
Professionalism	1	0.19**	0.13	0.17*	0.09 (n=178)
		(n=180)	(n =177)	(n=125)	
Parental	0.19**	1	0.35**	0.07	0.36**
engagement	(n=180)		(n = 177)	(n=179)	(n=179)
Relations	0.13	0.35**	1	0.21**	0.76**
	(n=177)	(n=177)		(n=175)	(n=177)
Performance	0.17*	0.07	0.21**	1	0.34**
oriented culture	(n=125)	(n=179)	(n=175)		(n=177)
Supportive	0.09	0.36**	0.76**	0.34**	1
school culture	(n=178)	(n=179)	(n=177)	(n=177)	

^{**} Correlation is significant at the 0.01 level (2-tailed).

Note: Correlation could not be done for the metaphors and trust culture (D31) because these questions were required to be ranked or required respondents to choose the top three descriptions. These are thus not suitable variables for checking relationships.

5 Factsheet: trust, professionalism and professional accountability

The following research questions are central to this factsheet.

- To what extent is trust (culture) a condition for professionalism and professional accountability?
- Who needs to trust whom, and with what goal in mind, to support professionalism and professional accountability?



^{*.} Correlation is significant at the 0.05 level (2-tailed).

- Do we find different levels of professionalism, trust (culture) and professional accountability in urban/rural schools or schools in different poverty quintiles?
- Do we find different levels of professionalism, trust (culture) and professional accountability in high versus low performing schools?

5.1 Constructing scales

To answer these questions, we created scales for the following constructs (See Section 2.4.3 above):

- Professionalism (7 items on a 4-point scale): α = 0.66, n = 180, average 3.22 (SD 0.44)
- Professional accountability (5 items on a 4-point scale): α = 0.46, n = 180, average 3.01 (SD 0.45)
- Trust culture (4 items on a 4-point scale): α = 0.81, n = 177, average 3.35 (SD 0.49)

Most of the scales are sufficiently reliable to include in further analysis; only professional accountability has a low alpha. Conclusions which include this variable therefore need to be interpreted with caution. We found overall positive averages on all scales with little variation in professionalism, professional accountability and trust culture between schools (all scales are very close to the average).

We also included three separate items which asked respondents about whose trust is needed for teachers to do their jobs. Table 23 indicates that trust from learners was considered as the most important relation for teachers to do their jobs; trust from colleagues, the head of department and principal was considered somewhat less important. The standard deviations for each of these questions is 1 or almost 1, indicating relatively high variation in responses across school staff.

Table 23: Averages and standard deviation for individual trust items (4-point scale)

Items	N	Average	SD
C13_ In my view, teachers can only do their job when they are trusted by learners	175	3.2	0.8
C15_In my view, teachers can only do their job when they are trusted by their colleagues	173	2.7	1.0
C16_In my view, teachers can only do their job when they are trusted by their HoD and principal	174	2.8	1.0

5.2 Professionalism, professional accountability and trust by urban/rural context and quintile

We explored how professionalism, professional accountability, trust cultures and trust relations varied by staff working in urban or rural areas and in schools in different deprivation quintiles. The response rates from staff in rural areas and most deprived schools (Quintiles 1-3) were rather low compared to staff in urban areas and more affluent schools (Quintiles 4-5), which means that any comparison needs to be interpreted with caution. The descriptive information in Table 24 suggests that there were no meaningful differences between staff in rural and urban areas, but there were slightly higher scores for staff in the more affluent schools (Quintiles 4 and 5) for the importance of trust from learners for teaching.



Table 24 Professionalism, professional accountability and trust by urban/rural context and quintile

							Trust in whom?	
			Professionalism	Professional accountability	Trust culture	C13_In my view, teachers can only do their job when they are trusted by learners	C15_In my view, teachers can only do their job when they are trusted by their colleagues	C16_In my view, teachers can only do their job when they are trusted by their HoD and principal
Urban/	Rural	N	30	29	36	35	35	35
rural		Mean	3.20	3.12	3.30	3.03	2.57	2.63
		SD	0.47	0.35	0.38	0.86	1.01	1.06
	Urban	N	132	114	132	149	147	148
		Mean	3.39	3.12	3.41	3.26	2.68	2.83
		SD	0.39	0.47	0.51	0.86	0.98	0.97
Quintile	1	N	17	12	17	19	19	19
		Mean	3.13	3.02	3.15	2.79	2.32	2.63
		SD	0.37	0.31	0.58	0.79	0.89	1.01
	2	N	25	24	29	30	29	29
		Mean	3.21	3.22	3.41	2.97	2.14	2.28
		SD	0.39	0.48	0.44	0.93	0.95	1.07
	4	N	27	24	27	31	31	31
		Mean	3.36	3.13	3.38	3.23	2.74	2.74
		SD	0.48	0.50	0.53	0.88	1.00	1.00
	5	N	84	74	86	95	94	95
		Mean	3.46	3.10	3.44	3.41	2.87	3.01
		SD	0.38	0.45	0.48	0.75	0.94	0.89

5.3 Correlations between professionalism, professional accountability and trust

We calculated correlations between professionalism, professional accountability and trust (trust culture) and specific relations in C13, C15 and C16. Table 25 suggests that trust relations - teachers are trusted by learners (C13), colleagues (C15), head of department and principal (C16) - were important for both professionalism and professional accountability, and a culture of trust is also positively related to professional accountability. School staff who considered trust from learners, colleagues, head of department and principal to be an important condition for doing their job seemed to value all these trust relations, with trust from colleagues and their school leaders in particular being strongly related.

Professionalism and professional accountability were somewhat related, although only to a minor degree.

Table 25: Correlations between professionalism, professional accountability and trust

		Professionalism	Professional accountability	Trust culture	C13_In my view, teachers can only do their job when they are trusted by learners	C15_In my view, teachers can only do their job when they are trusted by their colleagues	C16_In my view, teachers can only do their job when they are trusted by their HoD and principal
Professionalism	Pearson Correlation	1	0.43**	0.15	0.57**	0.68**	0.70**
	N	180	180	177	175	173	174
Professional accountability	Pearson Correlation	0.43**	1	0.42**	0.22**	0.24**	0.24**
	N	179	180	177	174	172	173
Trust culture	Pearson Correlation	0.15	0.42**	1	0.17*	0.06	0.03
	N	177	177	177	172	170	172
C13_In my view, teachers can only do their job when	Pearson Correlation	0.57**	0.22**	0.17*	1	0.55**	0.53**
they are trusted by learners	N	175	174	172	175	171	171
C15_In my view, teachers can only do their job when	Pearson Correlation	0.68**	0.24**	0.06	0.55**	1	0.85**
they are trusted by their colleagues	N	173	172	170	171	173	172
C16_In my view, teachers can only do their job when	Pearson Correlation	0.70**	0.24**	0.03	0.53**	0.85**	1
they are trusted by their HoD and principal	N	174	173	172	171	172	174

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

5.4 Analysing interactions between constructs: trust and professionalism

We used multiple regression analysis (with forced entry) to measure how the trust variables (trust culture and items C13, C15 and C16) predicted professionalism. The outcomes indicate that only a moderate amount of variation in professionalism can be explained by these variables. Trust culture and relations accounted for 58.4% in variation in professionalism ($R^2 = 0.584$; p < 0.05). All trust relations are significant predictors for professionalism (p < 0.05). Trust culture is not a significant predictor for professionalism (p > 0.05).

Table 26: Regression analysis to predict professionalism

Model	Coefficients	Std. Error	t	Sig.
(Constant)	1.80	0.17	10.78	0.000
Trust culture	0.07	0.04	1.49	0.139
C13_In my view, teachers can only do their job when they are trusted by learners	0.14	0.03	4.31	0.000
C15_In my view, teachers can only do their job when they are trusted by their colleagues	0.11	0.04	2.57	0.011
C16_In my view, teachers can only do their job when they are trusted by their HoD and principal	0.15	0.04	3.58	0.000

Dependent Variable: Professionalism

R2 = 0.584; p < 0.05

5.5 Analysing interactions between constructs: trust and professional accountability

Our multiple regression analysis then included trust culture and items C13, C15 and C16 as predictors of professional accountability. The outcomes indicate a similar model fit. The trust culture and relations accounted for 25.6% in variation in professionalism accountability ($R^2 = 0.256$; p < 0.05). Trust culture is the only significant predictor for professional accountability (p < 0.05); however, all trust relations are not significant predictors of professional accountability (p > 0.05).

Table 27: Regression analysis to predict professional accountability

Model	Coefficients	Std. Error	t	Sig.
(Constant)	1.45	0.22	6.50	0.000
Trust culture	0.36	0.06	5.88	0.000
C13_In my view, teachers can only do their job when they are trusted by learners	0.05	0.04	1.17	0.243
C15_In my view, teachers can only do their job when they are trusted by their colleagues	0.07	0.06	1.20	0.230
C16_In my view, teachers can only do their job when they are trusted by their HoD and principal	0.02	0.06	0.40	0.691

Dependent Variable: Professional accountability

 $R^2 = 0.256$; p < 0.05



5.6 Summary conclusions: trust, professionalism and professional accountability

The findings presented in this factsheet suggest that school staff varied in their level of professionalism and professional accountability, although not systematically by urban/rural context or quintile.

Overall, school staff subscribed to notions of professionalism and professional accountability, whereby being the beneficiary of trust relations (teachers are trusted by learners, colleagues, head of department and principal) seemed to be the most important condition for school staff to do their job, and a culture of trust was seen to be particularly relevant for professional accountability.

Professionalism and professional accountability are somewhat related, although only to a minor degree, indicating that views on professionalism do not necessarily imply that staff subscribe to professional accountability.

Trust from colleagues, the head of department and principal was considered somewhat less important by school staff as an enabler of their professional roles compared to trust from learners. The extent to which these relations were considered important, however, varied considerably across school staff categories. Staff in the more affluent schools (Quintile 4 and 5) seemed to value the importance of trust from learners for teaching somewhat higher compared to their colleagues in less affluent schools, although variation was likely influenced by low response rates from staff in the poorer schools.

We found high correlations between all types of trust (from learners, colleagues, head of department and principal) and particularly between trust from colleagues and trust from school leaders.

Our findings are not generalisable given the relatively low response rates and that our sample particularly represented schools in Quintile 5 in urban areas in Gauteng and KwaZulu-Natal.

6 Factsheet metaphor

In this factsheet, we aim to answer the following research questions:

- Which metaphors do school staff in high and low performing schools in rural and urban areas in South Africa use to refer to their school organisation?
- How are these metaphors related to/informed by the environment and school community in which they work (parental engagement and relations in the school)?
- How do these metaphors shape school staff's professionalism and professional accountability?
- How do metaphors vary for staff in low versus high performing schools?

6.1 Constructing scales

Our previous case studies in four low and four high performing schools, implemented in 2017-2018, indicated four metaphors used by staff to describe their school: family, hospital, factory and warzone:



Box 1. Four metaphors to describe a school

Family:

In this school, we consider each other as family. Colleagues are brothers and sisters to me. The school is like a home to me where we nurture the children.

Factory:

Our school runs like a factory: we have a well-planned and efficient process to deliver the curriculum and treat all the learners in the same manner.

Hospital:

Learners come to school to be taught by skilled professionals who know what they need. Teachers diagnose student needs and adopt their instruction accordingly. Learners will achieve well when they – and their parents – follow our instructions.

Warzone:

This school feels like a warzone. There is a lot of conflict between staff, parents and learners. We need to protect ourselves from burglary and violence, including from students who are disruptive. When parents have an issue, it's not safe to speak to them alone in the classroom.

The items in four scales to measure the following constructs is based on Section 2.5.3 (here we only include summary statistics):

- Parental engagement (5 items): $\alpha = 0.75$, n = 181, average 2.76 (SD 0.54)
- Relations (between school teaching staff, parents, learners) (7 items): α = 0.74, n = 177, average 3.20 (SD 0.40)
- Professionalism (7 items on a 4-point scale): α = 0.66, n = 180, average 3.22 (SD 0.44)
- Professional accountability (5 items on a 4-point scale): α = 0.46, n = 180, average 3.01 (SD 0.45)

Three of the scales are sufficiently reliable to include in further analysis; only 'professional accountability' has a low alpha (0.46). Conclusions which include this variable therefore need to be interpreted with caution.

On average, school staff were relatively positive about parental engagement, relations, professionalism and professional accountability in their school. The low standard deviation of these items further suggests that the data points are very close to the averages. For the purposes of Cronbach alpha, there is a relatively high rate of missing values for parental engagement (29%) and relations (32%) due to many respondents choosing the options 'don't know' or 'prefer not to say' in these questions. For 'parental engagement', missing responses were particularly in the category 'don't know', whereas missing values on questions about relations were almost equally split between 'don't know' and 'prefer not to say'. However, for the descriptive, all records were included, except where in all items 'don't know' or 'prefer not to say' were selected.

6.2 Metaphors to describe the school

Table 28 presents the number and proportion of respondents ranking each metaphor as '1' or the best fitting description of their school.

Just over half of the respondents (52.0%) chose 'family' as the metaphor that best describes their school; the hospital metaphor was chosen by almost a third of the respondents, while 'factory' was



the best fitting metaphor for 17.9% of school staff. War zone was selected by only a small number of staff (five).

Table 28: Metaphors which best fits the school best

	Number	Proportion
Family	93	52.0%
Factory	32	17.9%
Hospital	49	27.4%
War zone	5	2.8%
Total	179	98.9%
Missing	2	1.1%
Total	181	100%

Table 29 presents respondents' first choice only in the rank order, whereas the order in which the metaphors were chosen is also relevant to understand school staff's views about their school. Table 25 therefore provides an overview frequency distribution of the level of fitness of all four metaphors. Family continued to be the best fitting metaphor for respondents, but both factory and hospital were selected by almost half of the participants as either the best or second best description of their school. Warzone continued to be the least fitting metaphor for the majority of school staff, although some selected it as their second or third option, indicating perhaps that – even in schools that resembled a family, factory or hospital there may be conflict, violence or disruption.

Table 29: Ordering of metaphors

	Fan	nily	Fac	tory	Hospital		Warz	zone
	No.	Prpn.	No.	Prpn.	No.	Prpn.	No.	Prpn.
Fits best: 1	93	52.0%	32	17.9%	49	27.4%	5	2.8%
2	41	22.9%	69	38.5%	64	35.8%	5	2.8%
3	41	22.9%	70	39.1%	53	29.6%	15	8.4%
4: Does not fit	4	2.2%	8	4.5%	13	7.3%	154	86.0%
Total	179	98.8%	179	98.8%	179	98.8%	179	98.4%
Missing	2	1.2%	2	1.2%	2	1.2%	2	1.6%
Total	181	100%	181	100%	181	100%	181	100%

6.3 Choice of metaphor by school socio- economic context

A further exploration of respondents' choice of best fitting metaphor by school context (see Table 30 below) suggests that the family metaphor featured as the best fitting metaphor for half to two thirds of school staff across all quintiles; staff in all Quintile 2 schools chose the factory as the best fitting option more frequently compared to staff in other quintiles, while the hospital metaphor was

selected more often by staff in Quintiles 1, 2, 4 and 5 schools. The relatively low number of responses in Quintiles 1 to 4 schools will likely have impacted our findings.

Table 30: Best fitting metaphor by quintile

Quintile		Th	is description	fits my schoo	l best	Total
Quintile		Family	Factory	Hospital	War zone	IUlai
1	Count	11	2	5	1	19
	% within Quintile	57.9%	10.5%	26.3%	5.3%	100%
2	Count	15	11	5	0	32
	% within Quintile	48.4%	35.5%	16.1%	0.0%	100%
4	Count	13	5	11	2	31
	% within Quintile	41.9%	16.1%	35.5%	6.5%	100%
5	Count	54	14	28	2	98
	% within Quintile	55.1%	14.3%	28.6%	2.0%	100%

Table 31 presents the choice of best fitting metaphor by rural/urban context, reflecting how the family metaphor fitted best for a high proportion of respondents. However, low response rates from schools in rural areas cannot support meaningful comparison.

Table 31: Best fitting metaphor by urban/rural

Rural/Urban	This description fits my school best					
Kurai/Orban		Family	Factory	Hospital	War zone	Total
Rural	Count	19	9	6	2	31
	% within Rural/Urban	52.8%	25.0%	16.7%	5.6%	100%
Urban	Count	80	23	46	3	148
	% within Rural/Urban	52.6%	15.1%	30.3%	2.0%	100%

6.4 Association between best fit school metaphors and school environment, professionalism and professional accountability

We used the chi-square test of association between the school best fit metaphors and school environment (parental engagement and relations, professionalism and professional accountability) to determine whether there was a statistically significant association between the two categorical variables. The following chi-square test tables below show the test of association between the school environment, professionalism and professional accountability variables and the four best fitting school metaphors to understand how the views of staff are potentially shaped by the community in which they work.

6.5 Association between best fit metaphors and parental engagement

The best fit school metaphors were significantly associated with parental engagement at a 10% significance level (p<0.1). Those staff who viewed their schools as a hospital metaphor were more likely to 'agree' with parental engagement (69.4%) than those who viewed their schools as a family



(62.4%), factory (65.6%) or warzone metaphor (40.0%). The warzone metaphor should be interpreted with caution because the sample size is very small (n=5).

Table 32: Association between best fitting metaphors and parental engagement

Best fit metaphors	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Family	1 (1.1%)	22 (23.7%)	58 (62.4%)	12 (12.9%)	93 (100%)
Hospital	0 (0.0%)	9 (18.4%)	34 (69.4%)	6 (12.2%)	49 (100%)
Factory	1 (3.1%)	8 (25.0%)	21 (65.6%)	2 (6.3%)	32 (100%)
Warzone	1 (20.0%)	2 (40.0%)	2 (40.0%)	0 (0.0%)	5 (100%)
Total	3 (1.7%)	41 (22.9%)	115 (64.3%)	20 (11.2%)	179 (100%)

Pearson chi2(9) = 14.8743 P-value = 0.094

6.6 Association between best fit metaphors and relations

The best fit school metaphors were not significantly associated with relations (p>0.05) (Table 33). This suggests that there was no significant difference between any staff of any school metaphor agreeing or disagreeing with relations at school. However, those staff who viewed their schools as a factory metaphor were more likely to 'agree' with relations in school (68.8%) than those who viewed their schools as family (63.4%) and hospital (65.3%). Furthermore, four out of five staff who viewed their school as a warzone agreed with relations in school.

Table 33: Association between best fit metaphors and relations

Best fit metaphors	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Family	0 (0.0%)	2 (2.2%)	59 (63.4%)	32 (34.4%)	93 (100%)
Hospital	0 (0.0%)	2 (4.1%)	32 (65.3%)	15 (30.6%)	49 (100%)
Factory	0 (0.0%)	0 (0.0%)	22 (68.8%)	10 (31.2%)	32 (100%)
Warzone	0 (0.0%)	1 (20.0%)	4 (80.0%)	0 (0.0%)	5 (100%)
Total	0 (0.0%)	5 (2.8%)	117 (62.4%)	57 (31.8%)	179 (100%)

Pearson chi2(6) = 8.7061 P-value = 0.191

6.7 Association between best fit metaphors and professionalism

The best fit school metaphors were not significantly associated with professionalism in school (p>0.05) (Table 34). This suggests that there was no significant difference between any staff of any school metaphor agreeing or disagreeing with professionalism in school. However, those staff who viewed their schools as a factory metaphor were more likely to 'strongly agree' with relations in school (65.6%) than those who viewed their schools as hospital (49.0%) or family (48.4%) metaphors.

Table 34: Association between best fit metaphors and professionalism

Best fit metaphors	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Family	0 (0.0%)	1 (1.1%)	47 (50.5%)	45 (48.4%)	93 (100%)
Hospital	0 (0.0%)	0 (0.0%)	25 (51.0%)	24 (49.0%)	49 (100%)
Factory	0 (0.0%)	0 (0.0%)	11 (34.4%)	21 (65.6%)	32 (100%)
Warzone	0 (0.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)	5 (100%)
Total	0 (0.0%)	1 (0.6%)	85 (47.4%)	93 (52.0%)	179 (100%)

Pearson chi2(6) = 3.9780 P-value = 0.680

6.8 Association between best fit metaphors and professional accountability

The best fit school metaphors were not significantly associated with professional accountability in school (p>0.05) (Table 35). This suggests that there was no significant difference between any staff of any school metaphor agreeing or disagreeing with professional accountability in school. However, those staff who viewed their schools as a family metaphor were more likely to 'agree' with professional accountability in school (79.6%) than those who viewed their schools as hospital (69.4%) or factory metaphors (68.7%)

Table 35: Association between best fit metaphors and professional accountability

Best fit metaphors	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Family	0 (0.0%)	4 (4.3%)	74 (79.6%)	15 (16.1%)	93 (100%)
Hospital	0 (0.0%)	7 (14.3%)	34 (69.4%)	8 (16.3%)	49 (100%)
Factory	0 (0.0%)	2 (6.3%)	22 (68.7%)	8 (25.0%)	32 (100%)
Warzone	0 (0.0%)	1 (20.0%)	4 (80.0%)	0 (0.0%)	5 (100%)
Total	0 (0.0%)	17 (7.8%)	134 (74.9%)	31 (17.3%)	179 (100%)

Pearson chi2(6) = 7.8496 P-value = 0.249

6.9 Summary conclusions: metaphors to describe school organisation

Half of the respondents chose 'family' as the metaphor that best fits their school, the hospital metaphor was chosen by almost a third of the respondents as the best fit for their school, while 'factory' was the best fitting metaphor for almost 20% of school staff. War zone was selected by only a small number of staff. The warzone metaphor seems to be the most distinct profile, although some respondents chose this metaphor as their second or third best option. This suggests that family, factory or hospital-type of schools can also experience a level of violence or disruption which would fit the warzone metaphor.

The chi-square test for association indicates that parental engagement was significantly associated with best fitting school metaphors. This further suggested that those staff who viewed their schools as a hospital were more likely to 'agree' that parental engagement was evident in their schools. In terms of relations, professionalism and professional accountability, there was no significant association with best fitting metaphors. This suggests that there was no significant difference between any staff of any school metaphor agreeing or disagreeing with relations, professionalism or professional accountability.

7 School performance

7.1 Professionalism, trust (culture) and professional accountability by school performance type

As is indicated in Section 2.3, secondary data was requested from the Gauteng and KwaZulu-Natal Departments of Education in order to help us understand how the constructs measured in our survey are related to school performance data. School data that had been collected by districts in the respective provinces as part of the Data-driven Districts (DDD)⁷ programme in the year 2021 was merged into the project dataset of the schools where teachers participated in our survey. In addition to performance data, we also requested data on learner attendance, educator attendance and additional learner and educator information.

The aim was to understand how the constructs measured in our survey and school context variables could be related to school performance data according to which schools were categorised by school performance type as high and low performing schools.

The constructs measured in our survey and school context variables were:

- Teacher professionalism, trust (culture) and professional accountability;
- Particular metaphors (e.g. family, hospital etc.) selected by teaching staff respondents as their best-fit for their school;
- School context (by province, quintile, rural-urban and teacher background);

However, in the provincial learner attendance, educator attendance and learner and educator data received, there was a high occurrence of missing values, so the data was deemed unusable. Only the learner assessment data on school performance had sufficient information to undertake an analysis. Upon further inspection, the school data was seen to have low response rates, and particularly in low performing schools. The sample predominantly represented schools in Quintile 5 in urban areas in Gauteng and KwaZulu-Natal. These characteristics limited the comparison. Nevertheless, it was deemed important to explore these features, as presented in the analysis below.

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⁷ In partnership with the Department of Basic Education (DBE) Data Driven Districts Programme aims to improve the quality, availability, analysis and use of education data in order to support improvements in learner outcomes. The Data Driven Districts program of the National Department of Education (2022) Sourced at: https://dbedashboard.co.za/Home/

7.2 Different levels of professionalism, trust (culture) and professional accountability by school performance type (high and low performing schools)

We explored how professionalism, professional accountability and trust cultures varied by staff working in high performing schools versus low performing schools. This is a binary variable categorised into 0 = Low performing and 1 = High performing. The table below shows that the school sample size in low performing schools was rather low compared to the size in high performing schools, which means that any comparison needs to be interpreted with caution. The descriptive information in Table 36 suggests that there were no significant differences in the mean between high performing and low performing schools; however the slightly higher mean scores for high performing schools suggests that staff in these schools valued professionalism and professional accountability more than staff in low performing schools, whereas staff in low performing schools valued trust culture more than staff in high performing schools.

Table 36: Different levels of professionalism, trust culture and professional accountability in high and low performing schools

	Low	performing s	school	High performing school		
	N	Mean	SD	N	Mean	SD
Professionalism	10	3.0	0.4	29	3.4	0.4
Professional accountability	10	3.4	0.3	29	3.5	0.4
Trust culture	10	3.4	0.4	29	3.3	0.4

7.3 Best-fit family metaphors and school performance type (low and high performing schools)

Metaphors did not seem to vary significantly by quintile, and the low response rates in rural areas precludes any meaningful comparison about choice of metaphors by rural/urban context. Our findings are not generalisable given the relatively low response rates from rural and Quintile 1,2, 3 and 4 schools and where our sample particularly represented schools in Quintile 5 in urban areas in Gauteng and KwaZulu-Natal.

In Table 37, at least half of respondents in low and high-performing schools selected the family metaphor as their best-fit. About one third of respondents in high-performing schools selected hospital as the next best fit, while more respondents in low than high performing schools selected factory. Higher learner numbers in low performing schools may have contributed to selection of the factory metaphor as next-best fit. Low response rates of staff overall, particularly in low performing schools, limits this comparison.



Table 37: Best fitting metaphor and low/high performing schools

School type (High/Low performing)	Family		Hospital		Factory		Warzone	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
High performing	61	50.0%	35	28.7%	22	18.0%	4	3.3%
Low performing	16	59.3%	3	11.1%	8	29.6%	0	0.0%
Total	77	51.7%	38	25.5%	30	20.1%	4	2.7%

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Appendix 1. Number of responses per categories

Table 1: Province and respondents

Province	Number	Proportion
GT	122	67.4%
KZN	59	32.6%
Total	181	100%
Quintile	Number	Proportion
1	19	10.5%
2	32	17.7%
4	31	17.1%
5	99	54.7%
Total	181	100%
Rural –Urban location	Number	Proportion
Rural	32	17.7%
Urban	149	82.3%
Total	181	100%

Table 2: Province and quintile

	Province							
Quintile	GT		KZN		Total			
	Number	Proportion	Number	Proportion	Number	Proportion		
1	13	10.7%	6	10.2%	19	10.5%		
2	18	14.8%	14	23.7%	32	17.7%		
4	15	12.3%	16	27.1%	31	17.1%		
5	76	62.3%	23	39.0%	99	54.7%		
Total	122	100%	59	100%	181	100%		

Table 3: Province and rural-urban location

		Pro	Total			
Rural/Urban	GT		KZN		Total	
	Number	Proportion	Number	Proportion	Number	Proportion
RURAL	7	5.7%	25	42.4%	32	17.7%
URBAN	115	94.3%	34	57.6%	149	82.3%
Total	122	100%	59	100%	181	100%

Table 4: Province and professional role of school staff

		Prov	vince		Total			
Professional role		GТ	KZI	N	iotai			
	Number	Proportion	Number	Proportion	Number	Proportion		
Teacher	84	70.6%	36	61.0%	120	67.4%		
HoD	16	13.4%	11	18.6%	27	15.2%		
	8	6.7%	2	3.4%	10	5.6%		
Deputy Principal								
Principal	11	9.2%	10	16.9%	21	11.8%		
Total	119	100%	59	100%	178	100%		

Table 5: Province and duration of experience per school staff role

Experience in		Provi	nce		Total		
this role in this	G	îT	KZI	N			
school	Number	Proportion	Number	Proportion	Number	Proportion	
Less than 5 years	57	52.3%	16	28.1%	73	44.0%	
Between 5 & 10 years	27	24.8%	24	42.1%	51	30.7%	
Between 11 & 15 years	12	11.0%	2	3.5%	14	8.4%	
Between 16 & 20 years	9	8.3%	7	12.3%	16	9.6%	
Between 21 & 25 years	3	2.80%	5	8.80%	8	4.80%	
Between 26 & 30 years	1	0.9%	3	5.3%	4	2.4%	
Total	109	100%	57	100%	166	100%	

Table 6: Province and population group of school staff

5 1.:		Prov	vince		Total			
Population group	G	Т	K	ZN	Total			
0 1	Number	Proportion	Total	Proportion	Number	Proportion		
Black African	69	56.6%	20	33.9%	89	49.2%		
Coloured	3	2.5%	1	1.7%	4	2.2%		
Indian or Asian	5	4.1%	32	54.2%	37	20.4%		
White	44	36.1%	6	10.2%	50	27.6%		
Other	1	0.8%	0	0.0%	1	0.6%		
Total	122	100%	59	100%	181	100%		

Appendix 2. Background tables

Table 1: Staff turnover in the past 5 years by quintile

Quintile	N	Mean	Minimum	Maximum	Std. Deviation
1	18	4.94	1	10	2.71
2	26	5.88	1	15	3.81
4	27	3.59	0	8	2.02
5	87	8.91	0	45	8.49
Total	159	6.88	0	45	6.81

Table 2: Staff turnover in the past 5 years by urban/rural location

Urban/Rural	N	Mean	Minimum	Maximum	Std. Deviation
Rural	27	6.97	0	20	5.62
Urban	131	6.86	0	45	7.07
Total	159	6.88	0	45	6.81

Table 3: Definitions

Parental engagement	Five item construct (Table 5) that refers to parental/caregiver capacity to support and supervise learners in school work, to provide basic household needs, who value education, and feel part of the school community
Relations	Seven item construct (Table 5) that refers to positive interactions: between school staff and learners; among teachers/school staff; between school management team (SMT) and teachers; between parents and school staff.
School community	refers to school staff, learners and parents of learners enrolled at the school.
School culture	Is based on variables 'Performance oriented culture' and 'Supportive school culture"
School environment	is based on variables: 'parental engagement' and 'relations'
School staff	refers to the following personnel categories: teacher, HoD (Head of Department), Deputy Principal and Principal.
Supportive school culture (3 items)	Three item construct (Table 5) that refers to a supportive culture among school staff including the SMT
Trust culture	Four item construct (Table 5) that refers to positive interaction between school staff and learners, collegial supportive interaction among teachers, and collaboration between school management team (SMT) and teachers. This refers to trust relationships in the school

Appendix 3. Survey

SECTION A: DEMOGRAPHICS

A1. What is your gender? * Male Female Other A2. What is your population group? * Black African Coloured Indian or Asian White Other A3. What is your date of birth? MM-DD-YYYY A4. Do you have a teaching qualification? *

Yes
No

A5. What qualification/s have you successfully completed?			
Matric/National Senior Certificate			
Teaching diploma			
Non-teaching diploma			
Bachelors degree			
Bachelor of Education			
Honours degree			
Masters degree			
Post Graduate Certificate in Education (PGCE)			
Advanced Certificate in Education (ACE)			
Other			
A.C. What is your formal rate at the school?			
A6. What is your formal role at the school?			
● Teacher HoD			
Deputy Principal			
Principal			
A7. How long have you been in this role at this school?			
Years Months			
- + - +			

SECTION B. SCHOOL COMMUNITY

In this section we will ask you some questions about the school's community and parents and their involvement in the school.

Please read the statements below and indicate the extent to which you (dis)agree.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Agree
- 4 = Strongly agree
- 5 = Don't Know
- 6 = Prefer not to say

Parents/caregivers of the learners in this school supervise their homework	1 2 3 4 5 6
Parents/caregivers of the learners in this school have the knowledge and skills to help them complete their homework	1 2 3 4 5 6
Parents/caregivers of the learners in this school value education	1 2 3 4 6 6
Parents feel part of the school community	1 2 3 4 5 6
Many families move in or out of the area/neighbourhood	1 2 3 4 5 6

SECTION B: COMMUNITY AND THE SCHOOL CONTINUED

Parents/caregivers of the learners in this school supervise their homework	1 2 3 4 5 6	
Parents/caregivers of the learners in this school have the knowledge and skills to help them complete their homework	1 2 3 4 5 6	
Parents/caregivers of the learners in this school value education	1 2 3 4 5 6	
Parents feel part of the school community	1 2 3 4 5 6	
Many families move in or out of the area/neighbourhood	1 2 3 4 5 6	
Most parents/caregivers have sufficient income to provide for basic needs	1 2 3 4 6 6	
I would highly recommend this school for a child I care about	1 2 3 4 5 6	
It is easy to fill teacher vacancies for this school	1 2 3 4 6 6	
How many teachers have left your school in the past five years?		

ex: 23

SECTION C. PURPOSE, ROLES AND RESPONSIBILITIES

As a teacher you have a range of roles and responsibilities. Some of these are part of your job description while others will vary according to the school community and learners you are teaching. We'd like to get a sense of what the most important (both formal and informal) responsibilities are for you.

There is no correct answer as all schools and teachers are different.

Please rank order the following statements according to importance for you in your current role:

1 = most important; 6 = least important

(Drag the statement to reorder)

- 1: Ensuring learners are fed and healthy
- 2: Ensuring learners develop social skills
- 3: Ensuring the emotional well-being of learners
- 4: Ensuring learners learn reading, writing and mathematics
- 5: Ensuring learners behave well in school
- Ensuring learners become good and responsible citizens

Please read the statements below and indicate the extent to which you (dis)agree.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Agree

In my view, teachers can only do their job when they are trusted by their colleagues.	1 2 3 4 5 6
In my view, teachers can only do their job when they are trusted by their HOD and principal.	1 2 3 4 5 6
In my view, teaching is a very complex and difficult job that only a professional with expert knowledge and skill can perform.	1 2 3 4 5 6
In my view, teaching is a service that takes care of learners with a professional insight.	1 2 3 4 5 6

SECTION C: PURPOSE ROLES AND RESPONSIBILITIES CONTINUED

In my view, teaching is acknowledged as a unique knowledge and skill that only a teacher can perform.	1 2 3 4 5 6
In my view, teachers in a school are responsible for the quality of each other's work.	1 2 3 4 5 6
In my view, teachers should be the ones who decide on what good teaching looks like.	1 2 3 4 5 6
In my view, teaching is a calling for life.	1 2 3 4 6
In my view, good teachers express their opinion about the quality of the school freely.	1 2 3 4 5 6

SECTION D. RELATIONS

Schools are places of people from various backgrounds and with some you will have better relations than others; this is a normal part of life. Here we would like to get a sense of what the relations are in your school.

Please read the statements below and indicate the extent to which you (dis)agree.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Agree
- 4 = Strongly agree
- 5 = Don't Know
- 6 = Prefer not to say

Relations between school staff and learners in the school are good	1 2 3 4 5 6
Relations among teachers in the school are good	1 2 3 4 5 6
Relations between SMT and teachers in the school are good	1 2 3 4 5 6
Relations between parents and school staff are good	1 2 3 4 5 6
Staff socialize with each other outside of the school day	1 2 3 4 5 6

SECTION D: RELATIONS CONTINUED

Relations between SMT and teachers in the school are good	1	2	3	4	5	6
Relations between parents and school staff are good	1	2	3	4	5	6
Staff socialize with each other outside of the school day	1	2	3	4	5	6
Staff help each other out when need be	1	2	3	4	5	6
If parents have a complaint about the teaching, they will go directly to the principal rather than to the teacher	1	2	3	4	5	6
Please tick 3 descriptions on the list bel	ow whic	h descri	be a tea	cher in	this sch	ool
you would trust.						
will not lie to me.						
is good at his/her job/work.						
means well and tries to do the right thing.						
will not deceive me.						
thinks that the same things are important a	as I do.					
is reliable						
is fair						
has a good reputation with colleagues						

SECTION E. EVALUATION

We know that schools vary in whether and how they evaluate teachers and learners. This section will ask a couple of questions on these practices in your school and hear your views.

Please read the following statements and indicate your agreement or disagreement

- 1 = Never
- 2 = Sometimes
- 3 = Most of the time
- 4 = Always
- 5 = Don't know
- 6 = Prefer not to say

When learners are not learning, their teacher would be reprimanded by his/her superior.	1 2 3 4 5 6
When learners are not learning, their teacher would receive support to improve his/her teaching.	1 2 3 4 5 6
When learners are not learning, a colleague would tell the responsible teacher.	1 2 3 4 5 6
When learners are not learning, the principal would tell the teacher to improve.	1 2 3 4 5 6
When learners are performing well academically, their teacher would receive a pay rise/bonus.	1 2 3 4 5 6

SECTION E: CONTINUED

You have been asked to nominate a teacher for a financial bonus

Who would you choose from the teachers described below.

- 1 = highest priority; 8 = least priority
- 1: A teacher who always works extra hours
- 2: A teacher whose learners have high test scores
- 3: A teacher who never receives parental complaints
- 4: A senior teacher who has been in the school Ionaest
- 5: A teacher who takes on extra administrative/management tasks
- 6: A teacher who is always asked for advice by other teachers
- 7: A teacher who gets awards as best teacher at the school every year
- 8: A teacher who is a member of a teacher union and who contributes to the activities of the union

SECTION F. DESCRIBING YOUR SCHOOL

Finally we will present you with some generic statements about your school. This will allow us to describe the differences between schools in a more generic, metaphorical manner.

Please read the brief descriptions below and rank order them from 1, 2 to 3:

- 1 = this description fits best to my school
- 3 = this description does not describe my school well.
 - 1: In this school, we consider each other as family. Colleagues are brothers and sisters to me. The school is like a home to me where we nurture the children.
 - Our school runs like a factory: we have a wellplanned and efficient process to deliver the curriculum and treat all the learners in the same manner.
 - 3: Learners come to school to be taught by skilled professionals who know what they need. Teachers diagnose student needs and adopt their instruction accordingly. Learners will achieve well when they –and their parents- follow our instructions.

Thank you for filling out the survey!

Submit