Optimising school leadership development for 21st-century learning: An in-depth analysis of South African private secondary schools in KwaZulu-Natal

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Abstract

There have been significant and rapid improvements in information and communication technology (ICT) since the early 1990s. Subsequent global changes have increased with the onset of the Fourth Industrial Revolution and have dictated pedagogical transformation. Many countries have moved from traditional approaches of education to 21st-century Learning (21CL). 21CL is ICT-aligned, inquiry-based, and includes the development of affective abilities.

School leadership influences all structures and individuals directly in a school. It has the potential to be one of the cornerstones of the paradigm shift to 21CL. I investigated how school leadership is developed to facilitate 21CL and how it can be improved.

I required quantitative and qualitative data to achieve the research objectives. Therefore, I adopted a mixed methods research approach that is underpinned by the positivist and interpretivist paradigms. I used a case study design. The data collection methods I employed were questionnaires, semi-structured interviews, and focus group interviews. Phase one of the research involved the quantitative data collection from twenty-five schools, of which five schools were purposely sampled for the second qualitative phase.

The use of transformational leadership, strategic leadership, system leadership, and ecological leadership in enacting 21CL featured prominently in the reviewed literature. However, the research findings show that, largely, these four leadership theories were not incorporated in leadership development in South Africa. The results also show that school leadership development specifically designed for 21CL, was limited. The leadership training that is available focused more on administrative tasks instead of on leadership theories and skills to facilitate 21CL. I recommend that further research be conducted in both private and public schools in other South African provinces.

Keywords: School Leadership, Development, 21st-century Learning, Leadership Theories

Introduction

The world is currently progressing through the Fourth Industrial Revolution that is characterised by rapid advancements in ICT (Maphosa et al., 2020). These ICT innovations have changed many facets of human existence (Raja & Laxshmi Priya, 2022). To align and remain relevant, educational systems have also needed to transform (Ilma et al., 2023). Many countries have changed and modified their conventional pedagogical approaches to 21CL (see, for example, Raja and Laxshmi Priya (2022)). 21CL is learner-focused, practical and inquiry-based, ICT-aligned, inclusive of ethics, and develops both cognitive and affective competencies (Maphosa, 2021). Effective school leadership is a necessary and critical component in determining the success of the change to 21CL (Munby, 2020). Therefore, in this research study, I investigated leadership development for 21 CL in private secondary schools.

School leadership impacts all areas of school life as Pan and Chen (2021) have pointed out. In the context of this study, school leadership refers to school principals, members of the senior management team (SMT), heads of the ICT department, as well as specific subject heads. All school leaders, especially principals, can be very influential in their institutions as Njukunye and Waithaka, 2020 have reminded us. Effective leadership influences all aspects of the school community and environment through the execution of long-term and short-term planning (Shava & Heystek, 2021). Thus, effective school leadership has been correlated positively with improved curriculum development, learner performance, and teacher effectiveness, as well as with the enactment of change resulting in improved educational strategies (Leithwood et al., 2020).

School leadership has the potential to facilitate the adoption of 21CL by all structures in a school (Shava, 2021). It can assist in developing strategies and plans when a school is changing to 21CL by managing and monitoring the change process, designing coping mechanisms to facilitate changes, providing feedback, and instituting corrective measures when necessary (Shava & Heystek, 2021). It can also play a significant role in the effective mediation between the policies of centralised government authorities and the daily practices of staff. School leadership can further expedite 21CL by sharing experiences of this pedagogy in their schools with other schools in the same district, region, and province (Gardner-McTaggart, 2022). Given the above important areas of involvement, effective school leadership may be deemed an essential component to the successful transformation to 21CL by schools. Some form of leadership development has usually accompanied the enactment of 21CL in educational systems around the world (Lilgenberg & Wrethander, 2023).

Many countries have invested heavily in the development of their school leadership teams, and more especially in their school principals since they head their educational institutions (Shava, 2021). Hammad and Bush (2023) have noted that Kenyan school principals recommend that much more relevant training be made available to them. In this research, I focus on how school leaders are developed to facilitate the enactment of 21CL, and how this development can be improved.

Grimes (2023) mentioned that one of the pivotal strategies utilised in Ontario, Canada, to enact 21st- century Learning, was to create the Institute for Educational Leadership that implemented rigorous and effective school leadership development programmes. School leadership training has also been placed as a priority in the transformation process by countries such as China, Brazil, Singapore, Austria, Scotland, the United Kingdom, and the United States of America (Choi et al., 2022). These counties have also established education leadership centres that are focused on the professional development of school leaders as Munby (2020) has noted.

The South African Government's Task Team on Educational Management was set up by the Department of Education in 1996 to evaluate school leaders. It also provided information for the creation of appropriate future leadership training and development courses. In South Africa, leadership training/professional development for school principals in the public sector is accentuated in the Quality Management System (QMS), while private schools may have their own professional leadership development requirements. Professional development courses for school leaders are also offered by both private and government tertiary institutions, as well as non-governmental organisations, such as the South African Council of Educators (SACE). Many countries around the world have introduced aspects of ecological leadership, system leadership, transformational leadership, and strategic leadership into their leadership development programs because these leadership paradigms have improved existing educational systems, and positively influenced ICT integration, a key facet of 21CL (Cabreros, 2023; Schmitz et al., 2023).

Literature review

This literature review demonstrates the need for formal school leadership training, the different types of training offered, and the prominent leadership theories used in the enactment of 21CL.

The need for formal school leadership development and training

School leaders are usually selected based on their teaching qualifications, years of teaching experience, and teaching expertise (Munby, 2020). However, the role of a school leader in the 21st century extends beyond this pedagogical sphere to incorporate a wide range of managerial and leadership functions, (Mvenene, 2020). The current model for the selection of school leaders is no longer viable (Brown & Weli, 2019). The new model of school leadership, being a specialist profession that requires highly trained and knowledgeable individuals, needs to be adopted (Tintoré et al., 2022).

Sepuru and Mohlakwana (2020) asserted that one of the major weaknesses of current school leaders is the lack of a theoretical foundation in leadership and management. Munby (2020), therefore, posited that school leaders need further development in leadership and management to be successful. School leaders may have leadership and managerial traits, but these should be developed through training so that these leaders can reach their full potential (Pan & Chen, 2021).

Sepuru and Mohlakwana (2020) proposed that leadership and management training and/or qualifications be a prerequisite for the appointment of school leaders. Choi et al. (2022) further suggested that leadership training and development should be continual since the educational sphere is dynamic. Tintoré et al. (2022) explained that both the United Kingdom and the United States of America have formal leadership qualification and training requirements. In South Africa by comparison, presently a level one teacher can be appointed as a school principal after seven years of teaching, without any formal leadership qualifications or experience.

At the present juncture, South Africa is one of the few countries that do not require a compulsory and specific qualification for principalship. This particular need has been part of a discussion among educational leaders for the past twenty to thirty years. The South African Standard for Principalship (SASP) (Department of Basic Education, 2015) has formalised qualification requirements for school principals as Mvenene (2020) has noted. The SASP was formulated according to the role of principals as outlined in Sections 16 and 16A of the South African Schools Act 84 of 1996. It describes the duties and expectations of school principals but still does not make leadership and management qualifications a prerequisite for the appointment of a principal (see Sepuru & Mohlakwana, 2020).

Types and effectiveness of leadership development and training available to school leaders

Jacobsen et al. (2022) argued that some leadership courses are ineffective because they do not incorporate the relevant content to facilitate effective teaching and learning, and do not address comprehensively the changing needs of the modern school leader in the 21st century. In Kenya, it was found that 53,7% of the training and development of school leaders was based on financial management, and only 26,4% was based on human resource management (Hammad & Bush, 2023). There was no leadership training for school leaders related to 21CL. Sepiriti (2023) revealed that only 37% of school leaders in Lesotho had any form of formal leadership training, and most of this training was on basic elements of leadership that formed part of their initial teacher training. The research of Mvenene (2020) revealed that in South Africa many school leaders did undergo some sort of leadership development, but they viewed the training as largely irrelevant, ineffective, and ill-structured.

Mestry (2017) explained that leadership development should include aspects of transformational leadership and change management because the educational sphere is dynamic. Munby (2020) emphasised that the effectiveness of a leadership development program can also be increased if it is practically oriented, offers support and mentorship structures, and focuses on the relevant needs of school leaders in the 21st century. Harris et al. (2021) added that COVID-19 changed the educational sphere drastically, and leadership training should be adapted to equip school leaders to cope in this new post-COVID digital context.

In South Africa, there are many different private and government tertiary institutions that offer educational leadership and management developmental programs that result in formal qualifications along with informal courses. However, a review of the course content at some of these institutions suggested that most of the programs might be too theoretical and not sufficiently practical.

While some of the leadership and management development programs are indirectly linked to 21CL, none of them are directly structured to facilitate the enactment of 21CL in schools. Sepuru and Mohlakwana (2020) agreed that the leadership and management courses available in South Africa are more theoretical and lack the practicality of a participant becoming a school leader in the 21st century. Even the in-service training and professional development programs seem to be administrative, and they lack relevance to changing educational leadership needs (Mestry, 2017).

The Advanced Certificate in Education (ACE) program, run by the University of Johannesburg, and other universities, has consistently attained positive reviews from school leaders from its inception in 2007 as noted by Mestry (2017). The ACE course was the product of government legislation in relation to the common national framework for education leadership development and was designed specifically to meet the deficit in leadership competencies among South African school principals (Sepuru & Mohlakwana, 2020).

The ACE course has evolved into the more comprehensive Advanced Diploma in Education (ADE) (see Mestry, 2017). The ACE and ADE leadership courses do have elements of relevant transformational leadership and practical applicability, but they are still focused on administration and not on the acquisition of leadership knowledge and skills. The ACE and ADE courses do not have specific components that are linked directly to the enactment of 21CL.

The prominent leadership theories used in the enactment of 21CL

Leadership can be defined as a collaborative process between leaders and followers, in which the leader equips and influences followers positively to achieve short-term objectives that are aligned with a long-term vision (Pan & Chen, 2021). There are components of different leadership theories that are aligned to 21 CL, but the four most prominent leadership theories in the reviewed literature were transformation leadership, strategic leadership, system leadership, and ecological leadership. In this study, therefore, I focus only on these four theories.

Transformational leadership is characterised by change and reform of all individuals, relationships, and structures, within the organisation, as well as affiliated structures outside the organisation according to Schmitz et al. (2023). The focus of transformational leadership is on the complete management of all aspects associated with radical organisational change, like ICT integration and 21CL in schools (Cabreros, 2023; Schmitz et al., 2023).

Safrida et al. (2023) explained that the focus of strategic leadership is the formulation of a realistic, but competitive vision for an organisation that involves all role players and is accompanied by strategic plans. It can influence profoundly the successful adoption of 21CL in schools because it not only designs a clear and realistic vision for the school but also formulates a comprehensive strategy of enactment (Safrida et al., 2023).

Courtney and McGinity (2022) explained that system leadership focuses on the development of the entire system and the efficient inter-related functioning of its different components. System-wide development has the capacity to expedite rapid, positive, and long-lasting changes, like 21CL, in each system in the school, and each school in the broader system. Courtney and McGinity (2022) went on to explain that system leadership aligns departments, organisational structures, resources, and curricula towards the common goal of educational advancement by assisting in the convergence of different innovations, mediating differences and tensions, effectively utilising resources, and comprehensively managing new dynamics that might arise from the involvement of different role players.

Ecological leadership describes the different relationships within a social system like a school (Hung et al., 2022). In ecological terms, this would refer to the relationships between living organisms, including humans, and their physical environment. This author explained that the multi-system structure of ecological leadership has the potential to provide a viable framework for the dissemination of 21CL to form comprehensive and sustainable improvements. This is because ecological leaders introduce changes into an organisation or school across the ecological levels and are thus able to compare and contrast the different interrelated factors that affect the successful implementation of the change.

All four leadership theories have been used in the successful enactment of 21CL, resulting in higher academic standards for learners, improved teacher morale, and enhanced efficiency of the school management teams.

Research methods

To fully realise the objectives of the study, following Lincoln and Guba (1986) I collected both quantitative and qualitative data and used a mixed-method research methodology underpinned by both positivist and interpretivist paradigms.

I used an explanatory sequential mixed methods design. The online questionnaires provided quantitative data about school leadership development for the enactment of 21CL and allowed all the participating private schools in KwaZulu-Natal to be quantitatively researched. I selected schools for this qualitative data collection using the results that emerged from the quantitative data. I selected schools with five or more responses from principals, deputy principals, ICT subject heads, and other subject heads to the online questionnaire for the qualitative phase of data collection. More comprehensive data about leadership training and leadership roles was provided in the qualitative phase given my use of individual and focus group interviews.

I chose a case study as the research design. It enabled me to explore and investigate the single enclosed theme of school leadership development related to 21CL in private secondary schools in KwaZulu-Natal. I did research on school leaders from different private schools by using questionnaires, semi-structured interviews, and focus group interviews.

I used a Department of Education online database to identify the 55 private secondary schools in KwaZulu-Natal. The contact details of these schools and of the principal or principal's personal assistant, together with their physical addresses, were recorded. Telephonic contact was made with each school and the research details were explained to the principal or another member of the school leadership team. Permission letters and research details were then emailed to the schools. Of the 55 private secondary schools, 25 returned the consent letter thus confirming their participation in the research study.

The school leaders from all fifty-five private secondary schools in KwaZulu-Natal formed the population in this research. In the context of this study, school leaders included principals, deputy principals, and subject heads. The leadership teams of the 25 participating private secondary schools received an online questionnaire in the form of a cross-sectional survey. The online questionnaires included mostly questions requiring quantitative answers and respondents had to choose from a range of stipulated options. The questionnaire also had a few open-ended qualitative questions. The sample of the study was selected from the population to extract the quantitative data.

Five secondary schools were purposively sampled; the principal, deputy principal (academics) and the ICT head participated in individual semi-structured interviews. Fifteen individual semi-structured interviews were conducted, three at each of the five sampled schools. The subject heads of different departments, at the five selected schools, participated in focus group interviews. The number of participants in the focus groups ranged from three to six. Five focus group interviews were conducted, one at each of the sampled schools. During the interviews the leadership theories and other relevant terms were explained to the interviewees if they required more clarity. All interviews were recorded and transcribed.

The quantitative data from the online questionnaires was analysed using the Statistical Package for the Social Sciences Twenty (SPSS 20). Descriptive and inferential statistical analyses were undertaken. The Chi-square goodness-of-fit test and the binomial test were used for the inferential statistical analysis. These tests were used to determine if the actual data distribution differed significantly from the expected data distribution. The qualitative data from the questionnaires were organised and examined. The data from the individual interviews and the focus group interviews were subjected to thematic analysis to identify patterns and themes.

My background as a 47-year-old Indian researcher in South Africa influences my work. My Indian heritage, combined with my experiences in South Africa, allows me to view leadership and education through a unique cultural lens. This dual perspective helps me to appreciate the diversity in leadership and learning approaches in education. Having taught physical science for twenty years and being a school leader for thirteen of the twenty-five years I spent in

schools, has given me a deep understanding of the educational system and the challenges faced by school leaders.

I ensured the reliability, validity, and trustworthiness of the research process and observed all ethical protocols. I achieved reliability by giving the same questionnaire to the respondents in the cross-sectional survey and by asking the participants in the interviews the same open-ended questions. I ensured validity by synchronising all components of the research methodology with each other in alignment with the research. I ensured credibility by utilising more than one data collection method and by returning the interview transcripts to the participants for verification. The identities of all schools and participants were kept anonymous and confidential. I triangulated the data from the online questionnaires, individual interviews, and focus group interviews to formulate recommendations and conclusions.

I followed all ethical considerations throughout the research process. I used pseudonyms to protect the identity of the participating schools and individuals.

Results and discussion

Response rates and demographic profiles

The response rate for the online questionnaire was 45%, and the response rate for the interviews was 100%; this increased the validity and trustworthiness of the findings. One hundred school leaders from twenty-five private secondary schools in KwaZulu-Natal answered the questionnaire. Fifteen school leaders participated in the individual interviews and twenty-one school leaders in the focus group interviews. The p-values with an asterisk in the tables of quantitative data indicate a statistically significant result that is not due to random chance. The p-values with an asterisk show that there is a real difference in the observed data and expected pattern, and the results are authentic and trustworthy.

Theme 1: Prior experience in leadership and management

Table 1 presents the quantitative data. A significant 75% of school leaders, did not have a certificate, diploma, or degree in management or leadership studies, and a significant 66% attended courses on leadership and management. A significant 56,3% rated the course(s) as good.

Table 1
Leadership/management qualifications and courses

Question	Categories	Frequency (%)	p-value
Do you possess a certificate/ diploma/ degree in leadership or management studies?	*Yes*	25 (25%)	<.0005*
	No	75 (75%)	
Attended courses	*Yes*	66 (66%)	.002*
	No	34 (34%)	

Question	Categories	Frequency (%)	p-value
Organised ...	*Internally*	7 (10.9%)	<.0005*
	Externally	24 (37.5%)	
	Both internally and externally	33 (51.6%)	
Offered in the form of ...	*Consistent and structured programs*	26 (40.6%)	.134
	Random programs	38 (59.4%)	
Course rating	*Poor*	-	<.0005*
	Adequate	12 (18.8%)	
	Good	36 (56.3%)	
	Excellent	16 (25.0%)	

When triangulated, the qualitative results affirmed the quantitative results. This is evidenced by the responses below.

> No (formal leadership/management qualifications). I have attended loads of (courses/training). They've all been internal and external. (P2)

> No (formal leadership /management qualifications). Head office has got a short leadership program if you want to apply for a position for a deputy or principal. It's called the management toolkit. (FG2F)

The responses also revealed that seniority and teaching abilities were the main criteria for leadership promotions and not leadership skills or qualifications.

> Senior teachers and teachers with good results are promoted. They do not sometimes have the leadership skills. (DP3)

> The best teachers get promoted but they might not necessarily be good managers, and they have no experience. (DP4)

The interview responses further revealed that the leadership training was more focused on daily managerial and administrative tasks, rather than on leadership aligned to 21CL.

> I have done a few (courses/training. . . Our head office was running a 3-day MBA. . . it gave me basic management and administrative tools. (FG5B)

Of the qualitative responses in the online questionnaire, 23% indicated that the leadership courses should be more consistent. Of these responses, 19%t indicated that the courses could

be more structured, and incremental as well as continual. The qualitative responses from the interviews indicated similar suggestions for improvement.

Seniority and good teaching abilities emerged as the key criteria used to appoint school leaders. This is congruent with literature which shows that school leaders are usually selected based on their teaching qualifications, years of teaching experience, and teaching proficiency (Munby, 2020). Most of the school leaders did not have any formal leadership qualifications but did attend courses/training in leadership and management. Leadership training, specifically related to 21CL, was limited. School leaders indicated that the received training was effective, but could have been more consistent, relevant, structured, and practical as well as continual. Training sessions were organised internally by the school, and externally, by affiliated bodies. The research findings also show that the main criteria for leadership promotions were seniority and teaching abilities, not leadership skills or qualifications.

In contrast, the literature reviewed showed that countries that successfully changed to 21CL, invested time and resources in developing the leadership knowledge and skills of their school leadership teams (Lilgenberg & Wrethander, 2023). Munby (2020) agreed that principals especially need further training and development in leadership and management to be successful as the heads of their institutions. The literature reviewed also showed that some countries have made leadership qualifications a pre-requisite for leadership promotions, while others have even developed leadership centres that focus on the development of school leaders (Munby, 2020).

Theme 2: Transformational Leadership

Table 2 below presents the quantitative data for transformational leadership. The data revealed that a significant 67% of respondents indicated that their knowledge/experience of transformational leadership was fair or good, and a significant 30% of respondents attended courses on transformational leadership in the context of 21CL. A significant 70% rated the course(s) as good.

Table 2
Data on transformational leadership

Question	Categories	Frequency (%)	p-value
Rate your experience of transformational leadership	*None*	5 (5%)	<.0005*
	Poor	13 (13%)	
	Fair	31 (31%)	
	Good	36 (36%)	
	Excellent	7 (7%)	
	unsure	8 (8%)	
Attended courses	*Yes*	30 (30%)	<.0005*

Question	Categories	Frequency (%)	p-value
	No	70 (70%)	
Organised ...	*Internally*	2 (6.7%)	.006*
	Externally	16 (53.3%)	
	Both internally and externally	12 (40%)	
Offered in the form of ...	*Consistent and structured programs*	13 (43.3)	.585
	Random programs	17 (56.7%)	
Course rating	*Poor*	-	<.0005*
	Adequate	5 (16.7%)	
	Good	21 (70%)	
	Excellent	4 (13.3)	

When triangulated with the quantitative results, the qualitative results also showed that the participants understood transformation leadership. They understood it as a leadership theory that is used to implement change.

> As a leader, you have to guide your school through the change, assess what's going to happen, bring everyone on board to believe in the change, plan the change . . . No (attendance at transformational leadership courses). (P3)

> I think [transformational leadership] is that people are invited to participate in change and contribute to ideas that will result in change . . . we are involved sometimes. No (attendance at transformational leadership courses). (FG3 C)

Although the quantitative data indicated that 30% of respondents attended transformational leadership development in the context of 21 CL, there was no evidence of such transformational leadership courses designed specifically for 21CL in the interview responses.

> I haven't really attended one that combined the two. I have attended ones that look at transformational leadership and then ones that look at 21st-century skills. (DP1)

> Not in that context (transformational leadership courses in the context of 21 CL) and not with that kind of link but yes (transformational leadership courses). . . both external and internal. (DP3)

Twenty-five per cent of the respondents mentioned that the leadership courses that they did attend should be more consistent, and 17% indicated that there should be more courses. The qualitative responses from the interviews provided similar recommendations.

The school leaders did have some prior knowledge and experience of transformational leadership. They were able to relate transformational leadership to the management of change in the execution of their leadership duties. Few of them attended courses on transformational leadership on its own, or in the context of 21CL, and these school leaders considered the training as having been effective. The findings revealed that the school leaders did not have a deeper understanding of the principles and abilities of transformational leaders. The five core abilities of transformational leaders include stimulating a collective vision, leading and directing the way forward, contesting present activities, facilitating participation by others, and attending to the emotional aspects of followers (Cabreros, 2023). The utilisation of transformational leadership practices facilitates the enactment of 21 CL because it is positively correlated with increased learner achievement, improved teacher involvement as well as with more efficient all-round school management (Sliwka et al., 2024). Although research shows that many countries have trained their school leadership teams in aspects of transformational leadership, when interpreting and enacting 21CL, this approach was not adopted by the participating schools.

Theme 3: Strategic Leadership

Table 3 presents the quantitative data for strategic leadership. The quantitative results showed that a significant 66% of respondents indicated that their knowledge/experience of strategic leadership was fair or good, and a significant 79% of respondents did not attend courses on strategic leadership, in the context of 21CL. The results also revealed that a significant 70% of the respondents who attended courses on strategic leadership, rated the course(s) as good.

Table 3
Data on strategic leadership

Question	Categories	Frequency (%)	p-value
Rate your experience of strategic leadership	*None*	10 (10%)	<.0005*
	Poor	-	
	Fair	27 (27%)	
	Good	39 (39%)	
	Excellent	5 (5%)	
	unsure	19 (19%)	
Attended courses	*Yes*	21 (21%)	<.0005*
	No	79 (79%)	
Organised ...	*Internally*	-	.127

Question	Categories	Frequency (%)	p-value
	Externally	14 (70%)	
	Both internally and externally	6 (30%	
Offered in the form of ...	*Consistent and structured programs*	8 (40%)	.371
	Random programs	12 (60%)	
Course rating	*Poor*	-	.002*
	Adequate	2 (10%)	
	Good	14 (70%)	
	Excellent	4 (20%)	

When triangulated, the qualitative results were similar to the quantitative results in that the interview responses showed that school leaders understood that strategic leadership involved long-term planning, and the establishment of a vision. Very few school leaders indicated an attendance at strategic leadership courses.

> You have to put clear strategies in place as to how you are going to get to where you need to get . . . It's about having a vision . . . No (did not attend courses on strategic leadership). (P1)

> We have already planned for the next few years . . . Strategic leaders can see a vision for the future and plan well for it. (FG5A)

Other responses indicated that strategic leadership was regularly used by school leaders and that therefore there should be much more training and development available.

> I can't say specifically that I have been exposed to a course on strategic leadership but in my role, I have to deal with the bigger picture of the school from a strategic perspective quite often . . . Courses? yes would be nice. (DP4)

> I think our school has initiated strategic leadership in goal setting for our school's vision for the next five years . . . No (I did not attend courses on strategic leadership), but I would like to learn more. (ICT1)

Overall, only 21% of the school leaders attended courses/seminars/programs on strategic leadership in the context of 21CL. This result was aligned with the qualitative findings. The respondents' suggestions on how to improve strategic leadership courses included greater consistency (50%), continuity (25%), and relevance (25%). The qualitative responses from the interviews provided similar suggestions.

School leaders did have some exposure to strategic leadership and were acquainted with some features. They understood that one of the key elements involved long-term planning according to an established vision. Some principals and deputy principals acknowledged using these guidelines in some of their leadership duties. Many of the crucial aspects and principles of strategic leadership did not emerge from the findings. Tañiza et al. (2024) explained that other key components of strategic leadership include informed decision-making, effective communication skills, the observation of ethical standards, and valuing emotional intelligence and reflexive thinking. The principles of strategic leadership have been used in changing traditional educational systems to create more effective and productive schools, resulting in many countries investing in strategic leadership training for their educational leaders (Safrida et al., 2023). In contrast, the research findings show that very few school leaders attended training on strategic leadership on its own, or in the context of 21CL. The school leaders who attended strategic leadership training considered it to have been effective.

Theme 4: System Leadership

Table 4 presents the quantitative data on system leadership. The data revealed that 53% of respondents indicated that their knowledge/experience of system leadership was good, or that they were unsure about it, and a significant 90% of the respondents did not attend courses on system leadership in the context of 21CL.

Table 4
Data on system leadership

Question	Categories	Frequency (%)	p-value
Rate your experience of system leadership	*None*	13 (13%)	<.0005*
	Poor	15 (15%0	
	Fair	16 (16%)	
	Good	23 (23%)	
	Excellent	3 (3%)	
	unsure	30 (30%)	
Attended courses	*Yes*	10 (10%)	<.0005*
	No	90 (90%)	
Organised ...	*Internally*	-	1.000
	Externally	5 (50%)	
	Both internally and externally	5 (50%)	
Offered in the form of ...	*Consistent and*	5 (50%)	1.000

Question	Categories	Frequency (%)	p-value
	structured programs		
	Random programs	5 (50%)	
Course rating	*Poor*	-	.150
	Adequate	3 (30%)	
	Good	6 (60%)	
	Excellent	1 (10%)	

The qualitative data corroborated the quantitative findings since the interview responses showed that school leaders' knowledge and exposure to system leadership was very limited. They reported how the exposure to system leadership took place mostly through indirect mechanisms such as regional and cluster departmental meetings.

> No, I don't have much (knowledge/experience of system leadership). No (I did not attend courses on system leadership). (P4)

> I don't think I have had exposure to other schools in terms of this type of leadership . . . but we do have regional IT subject meetings where we share content . . . No (I did not attend courses on system leadership). (ICT5)

The main reason for this lack of collaboration was competition between and among the schools.

> There is a tendency for them to do it separately and learn on their own, because of competition . . . very little collaboration even though they could benefit from it. No (I did not attend courses.) (ICT3)

Although school leaders had limited exposure to system leadership, they reflected that this could be very useful in bringing about change.

> I don't have knowledge on that, but it sounds particularly interesting. Challenging as well because schools have to set aside their competition and work towards a common change. (DP3)

Only 10% of school leaders attended courses on system leadership in the context of 21CL. These school leaders indicated that the courses could be improved by increasing their continuity so that courses are more developmentally structured (67%). The qualitative data from the interviews provided similar suggestions.

School leaders had limited knowledge, experience, and training in system leadership. They were not aware that the main goal of system leadership is the development of all systems in

the school (Courtney & McGinity, 2022). They were also not aware that that some of the key tools used was mapping, peer shadowing and harnessing the combined acumen (Courtney & McGinity, 2022). Competition between and among schools featured prominently as one of the reasons for the lack of system leadership. Those school leaders who did have some exposure to system leadership recognised the usefulness of this leadership theory in enacting change such as 21CL. Literature shows that the use of system leadership facilitates the successful enactment of 21CL in schools resulting in many countries engaging in system leadership development of school leaders as Lin et al. (2023) have observed. Yet, the research findings show that school leaders' knowledge, experience, and training in system leadership was less focussed than that of transformational leadership and strategic leadership.

Theme 5: Ecological Leadership

Table 5 presents the data on ecological leadership. The results revealed that a significant 73% of respondents indicated that their knowledge/experience of ecological leadership was either non-existent or poor, or that they were unsure about it, and a significant 95% of respondents did not attend courses on ecological leadership in the context of 21CL.

Table 5
Data on ecological leadership

Question	Categories	Frequency (%)	p-value
Rate your experience of ecological leadership	*None*	19 (19%)	<.0005*
	Poor	27 (27%)	
	Fair	14 (14%)	
	Good	10 (10%)	
	Excellent	3 (3%)	
	unsure	27 (27%)	
Attended courses	*Yes*	5 (5%)	<.0005*
	No	95 (95%)	
Organised . . .	*Internally*	1 (20%)	.819
	Externally	2 (40%)	
	Both internally and externally	2 (40%)	
Offered in the form of . . .	*Consistent and structured programs*	1 (20%)	.180
	Random programs	4 (80%)	

Question	Categories	Frequency (%)	p-value
Course rating	*Poor*	-	.819
	Adequate	1 (20%)	
	Good	2 (40%)	
	Excellent	2 (40%)	

When triangulated, the qualitative results supported the quantitative results. Although school leaders were not familiar with ecological leadership, as a theory, together with its terminology, they admitted to using it regularly when enacting change at their schools.

> I don't have any clue of what the term ecological leadership is . . . this is perhaps semantics . . . But I am sure it is happening with any change . . . Without the terminology though . . . No (I did not attend courses on ecological leadership. (P5)

> I would imagine that, with ecological leadership, you want to achieve success at all levels by effectively communicating the change at different points. . . We address the changes informally in our staff meetings . . . but not under a heading. (FG5B)

The interview responses also indicated that . . . ecological leadership is sometimes not practiced because of the adoption of an autocratic approach to leadership. This results in the ecological systems not being harmonious.

> I don't think there is such a thing. It's just a top-down approach at school. That's it, we are changing over, and you just have to do it. I don't think all stakeholders are taken into account sometimes . . . (FG2D)

Similar to the quantitative results, the responses from the interviews also revealed that school leaders did not attend courses specifically labelled ecological leadership. However, they did attend courses on implementing change across the different levels of the school.

> I haven't attended any course specifically on it but there were elements of it in several seminars that I have attended. They were effective. (DP4)

> I don't know it and I don't fully understand it . . . Probably we have done it informally when learning about the different parts of a school . . . No (I did not attend courses on ecological leadership. (ICT4)

Only 5% of respondents attended courses on ecological leadership in the context of 21CL. Their suggestions in the online questionnaire about how to improve these courses included reference to continuity in having one course lead into another (50%), and more formal studies (50%). The recommendations from the interviews were similar.

Ecological leadership has featured prominently in research on effecting successful educational reform, such as 21CL (Constantinides, 2023). However, school leaders were

formally exposed to this leadership theory to a very limited extent. The exposure to ecological leadership was less than to the other discussed leadership theories although ecological leadership has been used successfully by many schools in other countries in interpreting and enacting 21CL (Hung, et al., 2022). School leaders did not know the basic terminology of the microsystem referring to activities in the classroom, the mesosystem referring to the school environment, the exosystem being comprised of people and institutions forming associations with schools, the macrosystem covering the global, national, socio-cultural factors, and the chronosystem referring to the ability of the ecological structure to change over time (Constantinides, 2023). However, many of them admitted to informally using aspects of this leadership theory, as well as attending courses in related fields.

Conclusion

It can be concluded that very few of the school leaders had qualifications in leadership or management. This can be attributed to seniority being the deciding factor in appointing school leaders, rather than leadership or management qualifications. However, the findings also showed that many school leaders attended in-service training. This training was more administrative and managerial and meant to equip school leaders to perform their daily responsibilities. The professional development related to the enactment of 21CL was very limited. The training was also not consistent, not structured according to a plan, and impractical.

Countries that have successfully interpreted and enacted 21CL have concurrently invested heavily in the leadership development of their school leaders. School leadership development was given priority because it influences all areas of school life. Some countries have made leadership qualifications a prerequisite for the appointment of school leaders. Other countries have developed entire research centres dedicated to the development of school leaders.

Private secondary schools in KwaZulu-Natal should encourage school leaders to engage with leadership qualifications. They should also provide professional development in leadership theory and practice that will assist them to facilitate the change to 21CL. This could be in the form of leadership conferences or in-service leadership training sessions. The developmental sessions should be relevant to 21CL and should be consistent, progressive, and practical.

Four of the prominent leadership theories that have been used frequently to facilitate the change to 21CL are transformational leadership, strategic leadership, system leadership, and ecological leadership. The research findings showed that school leaders did have some knowledge and experience of transformational leadership and strategic leadership. Their knowledge and experience of system leadership and ecological leadership was extremely limited. None of the school leaders had any in-depth knowledge or experience of any of the four leadership paradigms. Few school leaders attended courses on transformational leadership in the context of 21CL. Training in the other three leadership theories was limited.

School leaders' exposure to the leadership paradigms was found to be significantly lacking. Private secondary schools in KwaZulu-Natal, should, therefore, embark on leadership

developmental programmes that focus on how the four leadership theories can enable 21CL. These programmes should focus on equipping school leaders with the requisite characteristics and abilities that will enable them to facilitate the change throughout all areas of school life.

Further research could be conducted into school leadership development for 21CL in South African private primary schools. It is also recommended that research be conducted into the development of school leadership for 21 CL in other provinces. Research could also be conducted into how school leadership at public schools can be developed to influence positively the viability of 21CL programs.

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