

# Education at a Crossroads: Competencies for Sustainable and Future-Oriented Educational Leadership

André du Plessis

*André du Plessis, Assoc. Prof. Dr., University of Pretoria, South Africa*

## Abstract

Leading for sustainable and future-oriented education requires agile educational leaders. This means that they must not only understand the interconnected complexities of education in the 21<sup>st</sup> Century, but also possess the relevant competencies to lead their educational institutions towards a sustainable future. This paper argues through a complexity theory lens that educational leaders who aspire to be sustainable and future orientated educational leadership must be contextually intelligent, be aware of global megatrends and their impact on education, be able to recognise and respond to opportunities, challenges and adversity, be able to lead transformation and change and know how to lead and manage learning organisations.

Keywords: educational leadership, complexity theory, contextual intelligence, global megatrends, strategic thinking, strategic planning, change leadership, learning organisations

## Introduction

If educational leadership is to be sustainable, it must be future-oriented, which indicates that the competences required of educational leaders and acquired by the learners are relevant and usable in the future world (Metsämuuronen et al., 2013, p. 402). Such leadership is described by Hargreaves and Goodson (2006, p. 25) as “leadership whose positive effects are sustained, or whose effectiveness does not fade over the tenure of the individual concerned”. It must therefore be intentionally focused on long-term goals, as opposed to short-term achievements (Al-khamaiseh et al., 2024, p. 7). Educational leaders must therefore demonstrate an unwavering commitment to a sustained and meaningful (positive) impact which enriches the educational landscape and promotes a culture of continuous improvement (Al-khamaiseh et al., 2024, p. 7). Hargreaves and Fink (2004, p. 3) define sustainable leadership as follows:

*Sustainable leadership matters, spreads and lasts. It is a shared responsibility, that does not unduly deplete human or financial resources, and that cares for*

*and avoids exerting negative damage on the surrounding educational and community environment. Sustainable leadership has an activist engagement with the forces that affect it and builds an educational environment of organizational diversity that promotes cross-fertilization of good ideas and successful practices in communities of shared learning and development.*

Based on the above backdrop, the question is: What competencies must education leaders have for sustainable and future-oriented educational leadership? This paper argues through a complexity theory lens that educational leaders who aspire towards sustainable and future orientated educational leadership must be contextually intelligent, be aware of global megatrends and their impact on education, be able to recognise and respond to opportunities, challenges and adversity, be able to lead transformation and change and know how to lead and manage learning organisations.

## A complexity theory lens

Educational systems and institutions consist of various interconnected sub-systems that continuously interact (du Plessis, 2021, p. 282). This interaction suggests that a relationship exists among the different components or agents within the system (Mason, 2008, p. 37), and these relationships result in mutual influence between the elements themselves as well as with the broader environment (Cohen et al., 2011, p. 28). This highlights the ever-changing and dynamic nature of education systems.

Since education systems comprise numerous interlinked elements or sub-systems—each with a distinct but interconnected role—complexity theory approaches educational reform from a broad and integrative perspective. Rather than adopting a simplistic or reductionist approach, it takes into account the mutual influences within and between these sub-systems. Complexity theory thus acknowledges both internal and external relationships within the system. Key components of complexity theory include interaction, feedback, connectedness, emergence, context, unpredictability, and non-linearity (du Plessis, 2021, p. 283).

The interaction component refers to the way individuals within educational institutions influence one another by interacting, adapting, and evolving together. This interaction fosters development and collaboration, as well as competition, which contributes to survival and progress (Cohen et al., 2011, p. 28).

Feedback plays a central role in complexity theory, emphasizing the exchange of information between different parts of the system (Cohen et al., 2011, p. 29). This feedback may be positive or negative: negative feedback helps regulate the system, while positive feedback leads to growth and transformation by amplifying even small changes.

Connectedness is another fundamental principle in complexity theory, highlighting that everything within a system is interconnected (Cohen et al., 2011, p. 29). These interactions are not only frequent but also occur across multiple channels, or are “multiply connected” (Haggis, 2008, p. 167). The complexity and variety of these connections mean that outcomes cannot be attributed to one or a few isolated causes.

Another important concept in complexity theory is emergence, which refers to new patterns or structures that arise through the interaction of system components (Cohen et al., 2011, p. 29; Haggis, 2008, p. 168). Closely linked to this is self-organization, where order and structure develop without centralized control (Cohen et al., 2011, p. 29).

The context aspect emphasizes the influence of the external environment on the system. Complexity theory considers the system to be open and evolving, constantly shaped by ongoing interaction with external forces beyond its immediate boundaries (Haggis, 2008, p. 167).

Unpredictability reflects the dynamic and evolving nature of educational systems. Due to both internal and external interconnections and interactions, outcomes often emerge in unexpected ways. The non-linear aspect of complexity theory challenges traditional linear understandings of cause and effect, instead proposing that multiple, interconnected causes operate in different directions and at various levels (Cohen et al., 2011, p. 30). As Cohen et al. (Ibid.) explain, living systems—whether individuals, groups, or communities—are embedded in networks and relate in diverse and complex ways.

### The importance of contextual intelligence

Contextual intelligence is required to enable educational leaders to apply appropriate professional discretion (Beyers & du Plessis, 2023, pp. 166-172). Kutz (2008, p. 23) defines contextual intelligence as:

*[the] ability to quickly and intuitively recognise and diagnose the dynamic contextual variables inherent in an event or circumstance and results in intentional adjustment of behaviour in order to exert appropriate influence in that context.*

Marishane (2016, p. 164) defines contextual intelligence as the integration of contextual knowledge, technical expertise, and practical experience. As such, possessing contextual intelligence can enable educational leaders to make well-informed and appropriate decisions.

Kutz (2008, p. 18) outlines three overlapping competencies that form the basis of contextual intelligence. Firstly, it involves an instinctive understanding of significant past experiences. Secondly, it calls for a critical awareness of current contextual dynamics. Thirdly, it requires a forward-looking mindset that is attuned to a desired future. Educational leaders must understand how these three dimensions—past, present, and future—interact, as this understanding guides their decision-making processes (Marishane, 2020, p. 2; Kutz, 2008, p. 18).

Marishane (2020, p. 42) explains that the importance of contextual intelligence is evident in how educational leadership is inherently linked to context. Firstly, leaders must comprehend the dynamic and complex nature of an institution's context to respond effectively. Secondly, context serves as a mediating factor between leadership and learners' educational outcomes, which can obscure the direct impact a leader might have. Thirdly, leadership plays a bridging role between the internal functioning of the school and its external environment, particularly during times of change. This means a principal can influence or adapt to change depending on the context. Lastly, leadership and context shape each other through ongoing mutual influence (Marishane, 2020, pp. 42-43).

### Awareness of global megatrends and their impact on education

Because megatrends will dictate the upcoming important changes that society will experience, educational leaders should not only be appraising global megatrends, but

also engage with them, as these megatrends will dictate the imminent and critical changes that society will experience. These imminent shifts require relevant and appropriate competencies of educational leaders for them to cope with the looming changes. By being mindful of global megatrends, educational leaders can respond more effectively to them and deal with the changes they may present practically and insightfully. When educational leaders anticipate change, they can use change to their advantage. In this regard, Tyagi et al. (2024, p. 276) argue that:

*Modern leadership requires a reassessment of established paradigms due to a confluence of circumstances that cause a significant change in the field. Leaders must negotiate this complex web of change, as they find themselves at the intersection of extremely challenging circumstances and game-changing opportunities.*

Educational leaders must also be able to contextualise the impact of global megatrends to their institutional context. This means that educational leaders must be conscious of the underlying discourses that accompany global megatrends. Fairclough (2005, p. 925) describes a discourse as a certain way of representing physical, social, and psychological aspects of the world. For example, political discourses may be liberal, conservative, social-democratic, etc. Thus, the relationships between social groups in a society are manifested in different ways through these discourses (Fairclough, 2005, p. 925).

To orient their institutions towards the future, educational leaders need to utilise their acquired knowledge of megatrends and the implications thereof for their institutions to guide them in their strategic thinking, strategic planning, and strategic responses. Heracleous (1998, p. 485) explains that the purpose of strategic thinking is “to discover novel, imaginative strategies which can rewrite the rules of the competitive game and to envisage futures significantly different from the present”. The thought process is thus synthetic, divergent, and creative in nature. On the other hand, the purpose of strategic planning is to “operationalise the strategic development through strategic thinking and to support the strategic thinking process” (Heracleous, 1998, p. 485). Here, the thought processes are analytical, convergent, and conventional in nature.

Strategic planning will provide the framework for how to strategically respond to the pressures exerted by global megatrends. It includes the people, practices, and technology that unlock institutional knowledge to ensure the relevance of the core business (teaching and learning) of the institution.

## The ability to recognise and respond to opportunities, challenges, and adversity

Global megatrends not only bring opportunities and challenges, but also potential adversity. For example, the rapid acceleration of digitalisation with technologies like artificial intelligence, 5G, and cloud computing has become omnipresent. This trend has brought many opportunities (e.g., online teaching and learning) and challenges (e.g., cybersecurity), and is not only reshaping industries, but education as well. This trend, however, also causes adversity by exacerbating socioeconomic disparities, with some sections of the population benefiting more than others.

Global megatrends often result in education reforms. Educational leaders must, therefore, understand the relationship between education reform and meta-level education enhancement indicators. This means that educational leaders must have a sound theoretical knowledge base and a critical understanding of the role of education policy and how it relates to practice. Therefore, they must be able to think critically, argue logically, and work independently and in a group when responding to educational, social, and economic data sets and to report and account in appropriate ways. In a sustainable leadership model, educational leaders seek opportunities and create experiences. They transition from problem solving to problem finding by actively seeking opportunities (Sanford et al., 2019, p. 13). Sanford et al. (2019, p. 15) explain as follows:

*Sustainable leadership requires that we do not accept the status quo, but always imagine something better as we embrace the need to change—for our students and ourselves, thoughtfully challenging the way things are ‘always’ done. Rather than dictating next directions, we need to become accepting of the complexity/messiness of (professional) learning in an ongoing and nourishing way. We learn not to shy away from critical questions and suggestions, but to reflect on these, consult with each other, and arrive at new ways—ways that might question existing rules and norms. Leaders in today’s complex world need to rely on each other, to support making “good” mistakes and learn from attempts.*

## The ability to lead transformation and change

Educational leaders who communicate a rich change story to their community, “helping [them] understand where the organization is headed, why it is changing, and why the changes are important”, are more than three times as likely to succeed (McKinsey & Company, 2018, p. 10). In this communication, educational leaders must be cognisant of the human side of change. By viewing the world through an empathetic lens, the educational leader raises awareness of the differences that make teachers and learners unique. It induces an examination of how learners and teachers experience their education (Sanford et al., 2019, p. 12). This implies a sensible understanding of the human experience of, among others, alienation, exclusion, and belonging; diversity and inequality; unity, cohesion, and division; national and group values; national and group cultures; and manifestos on human rights and education.

As argued by Sanford et al. (2019, p. 20), educational leaders “need to connect, reflect, and respect others’ perspectives in order to sustain ongoing change that is an increasingly inevitable dimension of complex 21<sup>st</sup> Century life”.

## The ability to lead and manage a learning organisation

Kools and Stoll (2016, p. 5) describe an educational institution that has “the capacity to change and adapt routinely to new environments and circumstances as its members, individually and together, learn their way to realising their vision” as a learning organisation. Organisational learning is the “continuous process of integrating and collectively interpreting knowledge that enhances the organisation’s collective ability to make sense of and respond to internal and external change” (Kools & Stoll, 2016, p. 5).

The focus must therefore be on empowering and enabling others to act and to challenge oppressive norms and power (Sanford et al., 2019, p. 20).

According to Kools and Stoll (2016, p. 5), when operationalising the characteristics of a school as a learning organisation, the collective endeavour must be focused on:

- developing and sharing a vision centred on the learning of all learners;
- creating and supporting continuous learning opportunities for all staff;
- promoting team learning and collaboration among all staff;
- establishing a culture of inquiry, innovation, and exploration;
- embedding systems for collecting and exchanging knowledge and learning;
- learning with and from the external environment and larger learning system; and
- modelling and growing learning leadership.

It is therefore important that educational leaders have a thorough understanding of constructs such as ‘learning organization’, ‘learning community’, ‘organizational learning’, ‘professional learning communities’, ‘community of leaders’, etc. This means that educational leaders must be catalysts for internal and external connectedness, which not only refers to connectedness between the people in their institution but also a connectedness to the shared vision of the institution and the broader professional community.

Educational leaders must know themselves, individually and in a team setting. This means that they must not only identify their own individual talents and creativity, but also those of their leadership team and then draw on them (Sanford et al., 2019, p. 15). In other words, educational leaders appreciate that “who we are is how we lead” (Brown, 2018, p. 164).

## Conclusion

Leading for sustainable and future-oriented education requires agile educational leaders. This means that they must not only understand the interconnected complexities of education in the 21<sup>st</sup> Century, but also be contextually intelligent in terms of their institution’s setting, background, situation, and milieu. Further, educational leaders must be knowledgeable of the latest global megatrends impacting education and be able to seize the opportunities that they present and innovate to overcome accompanying challenges. It is important that they can challenge the status quo through strategic planning, develop and implement strategies to mitigate adversity.

Future-oriented educational leaders must know how to lead and manage change by being empathetic to the human element of change. This they do by developing their institution as a learning organisation through shared and distributed leadership practices, allowing their staff to continuously learn and develop.

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