

## **A practice based approach to theorising digital education leadership**

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### **Abstract**

This paper conceptualises a holistic approach to digital education leadership, presenting the argument that digital education leadership is grounded in the practice that it seeks to foster (digital literacy practice) and the processes involved in teaching that practice (digital education). In other words, digital education leadership cannot be viewed in isolation, separate from digital literacy or digital education. The foundational dimensions of the digital in this framework are premised on understandings of literacy as social practices. In brief, we understand that literacy involves sets of practices which are tied to domains of practice (e.g. learning). Furthermore, because literacy is about being able to participate in social practices, and because the contemporary world is technology saturated, then in order to create a life for oneself, one needs to be capable of participating (living, learning and working) in this evolving digitally mediated society. The paper presents a new conception of digital literacy, digital education and digital education leadership, and the relationship between them. The conceptual framework presented arises from a collaborative project across eight Commonwealth countries; it will be used as the basis of a curriculum to be implemented to support digital education leadership. The paper will also discuss the challenges faced in terms of conceptualising digital education leadership in the Commonwealth context and the processes used to address these challenges.

### **Introduction**

The Commonwealth Digital Education Leadership Training in Action (C-DELTA) project is a programme of the Commonwealth of Learning (COL) that intends to promote digital education in the Commonwealth nations. C-DELTA will engage with governments, educational institutions, teachers and civil society organisations to develop learning materials around digital education, assess digital education competencies and provide training opportunities for students, educators and policy makers. The C-DELTA programme will provide a framework for fostering digital education and developing skilled citizens for lifelong learning (Commonwealth of Learning, 2016).

To this end, COL commissioned a research team based at the Centre for Innovation in Learning and Teaching (CILT), University of Cape Town, to develop a concept paper with the aim of theorising a curriculum framework for digital education leadership. In April 2016, the research team (hereafter called CILT) convened a group of international experts at a two-day workshop in Cape Town, South Africa, to discuss and conceptualise a framework for the curriculum. The Advisory Group (AG) participants at the workshop came from different countries: Canada, Ireland, Malaysia, Mauritius, Pakistan, South Africa and the United Kingdom. In addition, virtual input was received from experts in Australia, Sri Lanka and the USA. The experts came from a range of disciplinary backgrounds, including curriculum design, educational research, educational technology, open and distance learning, and literacy studies. At the workshop, a preliminary draft document was the catalyst for intense discussion, which continued online through contributions in a range of formats, resulting in a genuinely collaborative concept paper.

This paper presents the key propositions from the concept paper. We propose a holistic approach to conceptualising digital education leadership. Our assumption is that digital education leadership must be grounded in the practice that it seeks to foster (digital literacy practice) and the processes involved in teaching that practice (digital education). In other words, digital education leadership cannot be viewed in isolation, separate from digital literacy or digital education. C-DELTA will develop digital education

leaders who demonstrate effective use of information and communication technologies (ICT) in their respective social contexts and who can advocate, influence and foster such capabilities amongst others in their communities of practice.

The paper introduces the C-DELTA CILT AG's view of the challenges faced in terms of digital education leadership in the global context and how these play out in the Commonwealth context. We present our conceptions of digital literacy, digital education and digital education leadership.

### **A Holistic View of Digital Education Leadership**

Given the importance of a holistic approach to digital education leadership, C-DELTA CILT AG posits the need for digital education leadership to be viewed in relation to digital literacy and digital education.

### **A Rationale for the Term “Digital Education Leadership”**

As societies shift towards the age of digitalisation, digital education is emerging as a growing concern for students, educators and policy makers (Ref). Although there has been large-scale integration of technology into learning and teaching activities at schools and universities, by and large the outcomes have not been particularly effective (Phillips, 2015; Price & Kirkwood, 2014). This could be attributed to perceptions about technology shaping social practices (e.g., learning, teaching, etc.) (Oliver, 2011) rather than social practices determining the technological tools to be drawn into a practice (which is purposeful and goal-oriented). The technological deterministic approach leads to the focus being placed on mastering digital competencies and the assumption that mastering these skills will have an effect on social practices. The social practice approach acknowledges the existence of multiple digital literacies that are context based (Street, 2001).

With the growing importance of digital literacy in educational agendas worldwide, there have been increasing calls for leadership development in digital education (Jameson, 2013; McLeod, 2015; Mishra, Henriksen, Boltz, & Richardson, 2016; Sheninger, 2014). As these calls for leadership development in digital education increase, various terms for describing leadership in this field have also emerged. The terms range from e-leadership, Edtech leadership, ICT leadership, technology leadership, virtual leadership and digital leadership to online leadership (Jameson, 2013). Among these terms, “e-leadership” is particularly prevalent. Providing one of the earliest definitions, Avolio, Sosik, Kahai and Baker (2000) define e-leadership as “a social influence process mediated by AIT [advanced information technology] to produce a change in attitudes, feelings, thinking, behavior, and/or performances with individuals, groups, and/or organizations” (p. 617). The term originates from the field of business and management, although the concept now focuses on leadership in the effective implementation of educational technologies (Jameson, 2013).

For the C-DELTA project, the term “digital education leadership” has been selected for three main reasons. Firstly, it better corresponds with the literacy at stake — digital literacy. Had the literacy been termed “e-literacy” then arguably “e-leadership” would have been a better term. Secondly, as “e-leadership” is more commonly used in business and management to describe virtual leadership, a term that has less historical baggage is preferential. Lastly, “e-leadership” is primarily concerned with the successful implementation of technology in teaching and learning practices. It emphasises leadership in educational technology. Our concern goes beyond this to the fostering of leaders who have the qualities to lead in a digital culture. They must have not only the means to provide knowledge in the effective use of educational technology but also the capacity to foster a culture of collaboration, innovation and lifelong learning in evolving, digitally mediated societies. Furthermore, they need to have insight into the needs of

organisations and individuals in a digital (education) landscape. The leaders might not be the most proficient users of digital tools, but they can see how digital tools, networks and associated structural changes impact on their organisation and the work people do and can thereby make appropriate critical decisions. To mark this shift in focus, the preferred term is “digital education leadership.”

### **Conceptualising Digital Literacy**

The foundational dimensions of the digital in this framework are premised on understandings of literacy as social practices. A detailed review of literacy and key literacy concepts related to digital technology that has informed our understanding of digital literacy is provided in the projects full concept paper (insert URL) In brief, we understand literacy to involve sets of practices which are tied to domains of practice (e.g., learning). To signify that there is no one universal approach to literacy, but that literacy is purposeful, meaningful and bound to domains of practice, theorists who adopt this view tend to use the term in the plural form — literacies (Street, 1984, 2001). Furthermore, we view literacy as being able to participate in social practices, and because the contemporary world is technology saturated, then in order to create a life for oneself, one needs to be capable of participating (living, learning and working) in this evolving digitally mediated society. Therefore, adopting a social practices approach to viewing literacy has particular implications for the understanding of digital literacy. Succinctly:

- a. This approach assumes that digital literacy involves not a set of universal abilities (skills) but aptness in social practices grounded in the digital domain.
- b. Practices associated with digital literacy are not “fixed,” nor do they occur in isolation; rather, they evolve in relation to the social, cultural, economic and political changes of a given context.
- c. It follows then that digital literacy is not a neutral concept but instead ideologically charged, subject to the relations of power and politics.

Informed by the literature (Concept paper reference), the C-DELTA CILT AG defined digital literacy as people’s ability to live, learn and work in an evolving digitally mediated society by mobilising resources, developing digital identities and critically engaging in networks. This definition demonstrates an understanding that digital literacy relates to how people are negotiating pathways within their respective contexts.

The C-DELTA CILT AG’s approach to teaching digital literacy is grounded in Green’s (1988) “dimensions of literacy.” Goodfellow (2004) and Lankshear and Knobel (1998) are among some scholar who have adapted the concept of literacy to apply to new technologies. Adopting a holistic approach, Green (1988) views literacy as comprising three dimensions: operational, cultural and critical. The dimensions are taken to be interrelated and not progressive. As such, it is possible for a person to develop all three dimensions simultaneously, or to be better at one dimension than another at a given time.

The operational dimension is the aspect of literacy concerned with developing performance with “the linguistic systems, procedures, tools and techniques involved in making or interpreting texts” (Goodfellow, 2004, p. 381). In the context of the C-DELTA CILT AG discussions, this dimension was framed as “developing capabilities” needed to operationalise a multimodal text. This links to views that technologies are a combination of hard and soft dimensions (Daniel, 1999; Dron, Reiners, & Gregory, 2011). Hard technologies are bits and bytes, electrons and email, satellites and search engines. Soft technologies are processes, approaches, sets of rules and models of organisation. As Daniel (1999, p. 69) observes, the hard technologies change, and the challenge that is both intellectually powerful and competitively cost-effective is to get the soft technologies right.

The cultural dimension is the meaning aspect of literacy. This dimension

takes more emphatic account of the notion that literacy acts and events are not only *context* specific but also entails a specific *content*. It is never simply a case of being literate in and of itself but of being literate with regard to something, some aspect of knowledge and experience. (Green, 1988, p. 162)

In other words, it places “operational competencies to service in an authentic social or occupational context, enhancing the learner’s ability to participate in the discourses of the social world” (Goodfellow, 2004, p. 381). Thus, in the context of the C-DELTA CILT AG discussions, this dimension is framed as “in context,” that is, producing, consuming and creating within a given cultural context. Moreover, because of the contested nature of the words “discourses” and “cultural” within the curriculum framework, we have chosen to replace the word “cultural” with “situated.”

The critical dimension is concerned with developing a critical stance in a given literacy practice. Understanding that literacy practices are ideologically charged, relative to those in social, economic and political power, Green (1988) posits that individuals will merely be socialised into the dominant meaning system unless they are provided with “critical insight into the process and possibilities of knowledge production, their own and that of the culture” (p. 163). In this respect, the critical dimension aims to provide “individuals, at any level of schooling, with the means to reflect critically on what is being learned and taught in classrooms and to take an active role in the production of knowledge and meaning” (Green, 1988, p. 163). The critical dimension thus entails “the means for transformation and active re-production of existing literacy practices or discourses, developing the ability to evaluate, critique and redesign the resources through which these practices and discourses are mediated” (Goodfellow, 2004, p. 381). In the context of the C-DELTA CILT AG discussions, this dimension is framed as “beyond context” — that is, analysing and creating beyond context. This dimension is central to explicating the “critical” aspect in digital education. In the C-DELTA CILT AG’s view, a critical education is one which promotes questions such as: Why does a particular technology exist? Whose interests does it serve? Whose interests does it frustrate? Could it be used differently and better?

### **Conceptualising Digital Education**

Drawing on the C-DELTA CILT AG’s definition of digital literacy, digital education can then be described as the process of teaching and learning involved in fostering the capabilities that are needed for an individual to live, learn and work in a digital society. In other words, it is concerned with fostering individuals’ capabilities to participate in the social practices that are required to live and thrive in the digital age.

The following tenets are deemed central to grounding the understanding of digital education.

- a. Digital education is concerned with developing people’s capabilities to live, learn and work in a digitally mediated society.
- b. Digital education is about more than working with digital resources (technical repertoire); it includes developing new resources and practices (innovation) and the capability and agency to judge and critique the systems of technology production, reproduction and use, as well as the social structures on which they are built (change agent).
- c. As technology has a tendency to impact on social practices, with the ability to modify relationships to ourselves, to others and to the world, digital education incorporates a critical understanding of digital culture and practices.

## Conceptualising Digital Education Leadership

It is essential to understand that leadership in digital education is a complex process involving different players at different levels. For instance, researchers are needed to investigate the social practices of digital culture and probe the possibilities and limitations of various educational technologies to inform best practice. Actions and advice from their research also have the potential to inform decision making regarding the choice of technologies suitable for various contextual needs, and to inform the designers of new technologies. Policy makers and heads of organisations are needed to envisage, lead by example and nurture digital literacies in their respective organisations. Teachers are key players in operationalising a given curriculum and integrating educational technologies into their classrooms and beyond. Students can also be digital change agents or leaders through peer-to-peer learning.

This view of leadership in many ways corresponds to Mishra et al.'s (2016) proposition that educational institutions are “complex ecologies.” They argue that “[b]y conceptualizing ICT as one element of this complex ecology, we prevent ourselves from falling into the trap of technological determinism, i.e., simple cause and effect relations between the diction of a new technology and its effects on organizations” (p. 261).

There are three key emphases for digital education leadership: (i) the effective implementation of digital technology; (ii) critical reflection on technologies; and (iii) leadership in fostering a particular type of individual for the digital age. This is evident in our definition of a digital education leader, which draws on the concept of an epistemic fluency that allows one to recognise, appreciate and understand the subtlety and complexity of a belief system one has not encountered before, whether that belief system is associated with a religious or ethnic community, or a scientific or professional community. This is important for an inter-cultural and inter-disciplinary understanding and capability (Goodyear & Zenios, 2007). Digital education leaders need to be able to take account of the context for action, and the ways in which — intentionally and unintentionally, for good or for less good — the introduction of new technologies inherently influences the context.

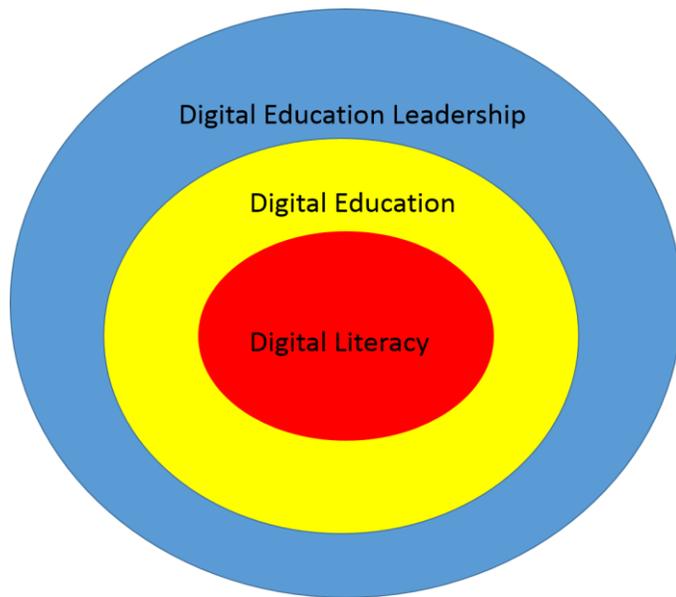
All in all, the C-DELTA CILT AG adopts a holistic view of digital education leadership, understanding that leadership in digital education occurs not in isolation, but as a means of nurturing and leading digital education and digital literacies. Drawing on the descriptions of digital literacy(ies), digital education and digital education leadership above, and the C-DELTA CILT AG's argument that literacy is concerned with participating in social life, digital literacy is placed at the centre for living, learning and working in an evolving digital society. This is aligned with the view that digital literacy is not an ability but a practice.

The figure below provides a visual summary of the C-DELTA CILT AG's perspective on the relationship between digital literacy, digital education and digital education leadership.

Digital literacy, as a social practice, is understood to be the core, as it is the outcome, the destination of digital education and digital education leadership. It is the purpose of digital education.

Digital education is the pedagogic intervention that goes into fostering digital literacies. It is the “how” of getting to digital literacy.

Digital education leadership is concerned with providing direction in terms of digital education by enhancing access, capacitating peers, making informed decisions and cultivating innovation, to achieve the learning goal (digital literacy).



*Figure 1.* A holistic view of digital education leadership.

### **Conclusion**

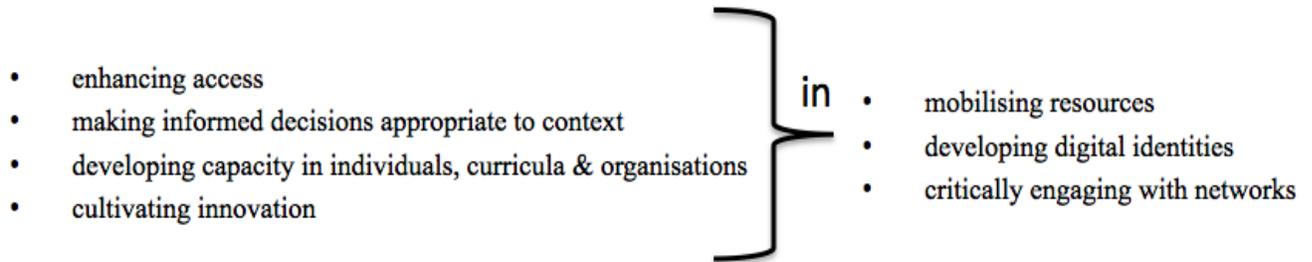
In this project we propose a view of digital education, which is about increasing people’s capacity in digital literacies - i.e., context-based digital literacy practices - rather than a digital competencies approach, because there is no one-size-fits-all method. This therefore indicates a need for digital education leaders who can lead others and foster digital literacies relevant to individual and local contexts by: creating awareness of and enhancing access to available resources (and ensuring equal access for the respective stakeholders); developing capacity in individuals, curricula and organisations; making informed, context-appropriate decisions; and cultivating innovation or being change agents in their own contexts.

We conceptualise digital education leaders as concerned with fostering digital literacy, innovation and change, as people who influence others through their creative pursuits and innovations in the effective use of ICT for teaching and learning. This view goes beyond skills and competencies, although digital education leaders need to be fluent in the use of ICT for learning and teaching. As a digital education leader, the individual must be able to translate literacy to leadership through questioning the status quo, providing direction and exercising influence.

Digital education is defined as the process of fostering people’s ability to live, learn and work in an evolving digitally mediated society by (i) mobilising resources, (ii) developing digital identities and (iii) engaging with networks. This means working with individuals, institutions, communities and networks to foster people’s ability to live, learn and work in an evolving digitally mediated society by:

- a. enhancing access — i.e., environmental considerations;
- b. developing capacity in individuals, curricula and organisations — i.e., operational dimensions;
- c. making informed decisions appropriate to context — i.e., situatedness, being a leader and change agent within a given context; and
- d. cultivating innovation — i.e. situatedness, being a leader and change agent outside a given context.

Digital education leadership is therefore summarised below.



Digital education leadership is more than a set of digital abilities or skills; it is a method and set of processes for doing and thinking about digital education. Hence, in order to construct a curriculum for digital education leadership, it is necessary for people to have the required capabilities to build on so that they can lead others in this regard.

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