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education in a digital culture

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Abstract

The influence of the digital culture on the modern childhood and adolescent educational context makes it dynamic and fast-changing. In a field characterised by technological innovation and change, leadership style is critical to facilitating successful adaptation of useful technology, which contributes to successful learning outcomes. At the same time, much of the discussion on digital culture and education is focused on the classroom level, and very little attention is given to leadership frameworks at the school, district or governmental level. This paper introduces constructs more commonly discussed in the study of leadership or organisations, and reviews literature on leadership issues in the modern educational context. It is argued that educational leadership should be more flexible to cope with technology-driven changes and new developments. This entails moving away from a leader-centric organisational framework toward a more democratised model. It is suggested that a transformational leadership style is most appropriate for organisations such as educational systems operating in a field characterised by change and innovation.

Keywords: educational leadership, educational technology, leadership, organisational theory, transformational leadership

Introduction

Few would deny that digital culture is creating pressure for change in organised public institutions for childhood and adolescent education. The permeation of personal computing, networked communication, and the participatory culture engendered by these technological tools in industrialised societies has incurred a cultural shift documented by anthropologists and sociologists (Ito et al., 2008; Ito, 2010), as well as economical and political changes described by legal scholars (Benkler, 2006; Zittrain, 2008). Since education exists in a socio-cultural context, it must change as well in order to adapt to the emergent needs of an increasingly digital public (Jenkins, 2009). At the same time, however, schools have proven to be rather conservative hamlets within the greater society, and in fact, there seems to be an underlying assumption that schools and school systems should remain relatively unchanged from their present state in industrialised societies—that is, social organs dominated by hierarchically organised, state-sponsored institutions with centralised leadership frameworks. Yet this assumption has little basis in theoretical or empirical evidence, especially when one considers that most of the discussion on digital culture and education has been at the classroom level, leaving the vital topics of leadership and organisational theory largely unexplored.

The pressure for educational systems to change makes the role of educational leadership critical. Here, it is important to note a distinction made between "leader" and "manager." Leaders are those in positions of authority or influence that serve to create and/or sustain effective and desirable change in organisations, while managers are those who serve to ensure, in a word, the opposite—a minimum of deviance from the status quo (Gibson, 2000). Managers are appropriate when the means and goals of an organisation are already established and constant, and there is ample precedence to learn

from and build expertise. On the other hand, leaders are needed when change is called for, and more so in an uncertain environment where the right direction for change is not readily apparent. Since it would be disingenuous to claim that the future direction of educational development is clear, the nature of educational leadership stands out as an important consideration in the overall discussion on digital culture and education.

Although the topic of leadership is pertinent to the current discourse, surprisingly little has been written about it. While studies on leadership have a long history in the military and business management disciplines (Northouse, 2010), there is scant literature that deals with educational leadership and technology. Furthermore, what does exist does not constitute a body of empirical knowledge adequate for informing optimal decision-making in the educational fields with regard to technology and a digital culture (McLeod & Richardson, 2011). At the same time, several inferences can be made from the existing scholarship, and these suggest that technology-driven change should make the future organisational state of educational systems differ considerably from traditional models.

One purpose of this paper is to bring leadership and organisational theory into the discussion on digital culture and education by reviewing relevant literature in the field. Practitioners and researchers focusing on the classroom level should be more informed about the organisational contexts in which they work so that they might understand the potential alterations to those environments. A second purpose of this paper is to point out common themes in the extant literature which suggest that the traditional role of an educational leader as a manager and central authority figure in a relatively stable system is rapidly becoming, or is already, outdated. Leadership must become more democratised in order to reflect changes that are occurring in the greater social context. This paper first considers the historical context of modern education. It briefly traces the development of the educational leadership in the United States and the industrialised West from the post-World War II era to the present. This history is useful for illustrating the socio-economic developments that coincide with a transition from a relatively stable organisation to a more dynamic one. Next, the concept of transformational leadership is introduced, and its advantages with regard to dynamic and creative organisations are outlined. Following this, the current state of educational leadership, specifically with regard to technology integration and utilisation, is examined. Finally, a discussion on the overall implications of the literature is offered.

Educational leadership, past and present

Education in the industrialised West has changed dramatically since the end of the Second World War, and continues to experience a paradigmatic shift in both socio-cultural context and leadership. Kowch (2009) outlines the historical development of educational leadership from the 1950's, when schools constituted systems that were largely closed off from the surrounding society. The purpose of the schools was largely to train manufacturing workers in basic reading and writing skills, which was considered a relatively systematic and well understood undertaking, so leadership was entrusted to expert managers. In these systems, the function of leadership was based on identifying relatively predictable outcomes and providing the means to achieve them. Teachers were considered mere cogs in the greater machine, and the principal or headmaster was the sole person in authority. In the 1960's and 70's, attention began to turn toward individuals rather than organisational systems partially as a result of the socio-cultural climate of increasing distrust of government during the Viet Nam War and Watergate scandals. This, along with a shift in focus from training industrial line workers to service workers, gave rise to the instructional or transformational schools of thought on

leadership that emerged in the 1980's and 90's. This leadership framework emphasised relationships within an organisation rather than the roles of individual members. With the turn of the millennium, the focus shifted to the organisation as a group and decentralisation of the traditional leadership role. Kowch argues that leadership should now be seen as existing in a more fluid organisation consisting of transient teams and networks rather than cogs performing repetitive tasks.

From the perspective of strategic decision-making, Cheng (2010) outlines the same societal contexts that affected the evolution of educational leadership strategies in the United States in a three-wave model. In the first wave (1950s-1960s), American society was industrial and the economy was production-based, making educational goals clear and predictable. Strategic leadership during this era was primarily inward-looking as schools concentrated on providing the relatively measurable skills of reading and math for an industrial workforce. In the second wave (1970s-1990s), the waning of a production-based economy and the waxing of service- and information-based industries created a demand for more sophisticated workforce skills, such as creative problem-solving, which in turn created a demand for higher education. This era was characterised by more choice for students, which created a commercialised market environment in which schools vied for "client" students. Educational leadership in this era was faced with strategic decisions for dealing with the competition and recruiting students. In the final wave, which includes the present, the internet and affordable computing are creating a globalised environment in which educational leaders are faced not only with more competition, but with competition from outside of their own localities. In other words, schools have changed from relatively closed systems in which one leader was responsible and accountable for producing predetermined outcomes, to dynamic systems that must adopt and respond to rapid societal changes on a global level.

Thus, the modern educational environment in the western industrialised world at the beginning of the 21st century is drastically different than that of the second half of the 20th century, primarily due to the decline of a manufacturing based economy and advance of the information and service based economies. It is also worth noting how the educational systems of the different eras reflected the economic base of the societies they served. In both the manufacturing sector and the education system designed to serve it, tasks are stable and repetitive, so very little creativity or problem solving is necessary. Also, immediate outcomes are relatively easy to measure so there is a clear indicator of performance. In such an environment, leadership can be relegated to a manager because it is possible to concentrate the knowledge necessary to sustain such a system in one individual, and it is desirable to maintain a steady environment with few deviations from routine. Contrastively, an information/service-based economy and the educational system designed to serve it are both characterised by change and innovation. Creativity is important because unforeseen challenges and opportunities that arise must be dealt with. Human relationships are important because a diminished ability to rely on set routines, and a continuing necessity for coordinated efforts mean that such connections must constantly be renegotiated. Most leadership theorists have noted that it is unreasonable to assume that a manager-type leader is suitable in such a situation.

Although the patterns outlined in this section deal specifically with the western culture, they can be expected to emerge in any region of the world that experiences similar socio-economic conditions (i.e., technically advanced or industrial countries). The question, then, of what type of leadership is required for a dynamic, and increasingly networked educational system, is one that every region touched by globalisation and the digital culture will eventually have to face.

Transformational leadership for dynamic organisations

Since the 1970s, much attention has been given to the notion and effectiveness of transformational leadership in the West (Northouse, 2010, p. 186). Transformational leadership is characterised by a focus on the concerns and needs of followers to develop them into semi-autonomous entities that can act to advance the goals of an organisation without the need of constant direction. According to Bass (1997), this contrasts with transactional leadership, which is another major framework for leadership style in modern society. Whereas a transformational style emphasises the quality of the relationship between leader and follower through ethical role-modelling, motivation and care for individual needs, a transactional style emphasises a contractual relationship between the leader and the follower based on extrinsic rewards and punishments. In this sense transformational leadership can be considered the more flexible approach that serves to empower and guide rather than to control subordinates. This style has even been compared to a completely selfless or "servant" style of leadership (Stone, Russell, & Patterson, 2004). According to this view, both transformational and servant leadership styles are characterised by role modelling, motivation, encouragement of risk-taking among subordinates and "individualised consideration," but that while a transformational leader is ultimately concerned with the organisation, a servant leader is more focused on the well-being of followers. Yet, the overall intent of both transformational and servant leadership is to empower and motivate followers to work autonomously for the success of an organization.

It is worth emphasising that the notion of transformational leadership is not meant to imply leaderless organisations. The leader in this model has three important coordinating roles. The first is that of motivator, which entails instilling in individual followers the will to work toward the goals of the organisation. To do this, the leader must understand those goals and the context in which the organisation operates. This is often difficult for individual subordinates to do as they are concentrating on the task at hand. The second role is that of communicator. Since individuals can very often become distracted with their own jobs and challenges, they must be reminded periodically of the overall vision. Finally, a leader must be a facilitator of communication among the members. Risk-taking and experimentation are encouraged in an organisation emphasising creative solutions, so learning from mistakes becomes the key to efficiency (Govindarajan & Trimble, 2010). Individuals cannot learn from each other if they are unaware of each others' actions, so it falls to the leader to ensure that adequate and productive communication takes place.

Organisational and leadership theory suggests the utility of a transformational leadership style particularly for a tech-driven operational environment. From the literature on business management in the technology industry, Kouzes and Posner (1996) focus on the "visionary" role of leaders, and admonish them to be ideal, unique and future-oriented as means of engendering follower support. Pulley, Sessa and Malloy (2002) outline a leadership development program that they created for Xerox. In the program, they address five "dilemmas" created by the new dynamic organisational environment. These include the need to empower individuals without isolating them, and the need to encourage input from the bottom while providing guidance from the top.

Empirical support from the business world
Transformational leadership is supported by empirical evidence suggesting that it is preferred globally in human society. According to Bass (1997), empirical studies show that the transformational model is preferred over transactional by followers across cultures in different countries around the world. In addition, MacDonald, Sulsky and

Brown (2008) show evidence that while perception of a leadership style can be "primed" in followers, the transformational style is more prototypically "salient" in most individuals. This suggests that, all else being equal, transformational leadership is more fundamental to human society and psychology.

There are also studies on outcomes that indicate transformational leadership is more effective than other models of leadership in dynamic organisational situations where creativity and autonomy among subordinates are required. Jung (2001) investigated the relationship between creativity and transformational and transactional leadership styles. He found that divergent thinking is more common in brainstorming sessions carried out under a transformational leadership condition, and that transactional leadership may actually be detrimental to creativity. Also, Jung and Sosik (2002) found that transformational leaders improved autonomy and morale, thereby improving performance among groups working in Korean firms. More recently, Munir and Nielsen (2009) found that transformational leadership had a positive impact on the health, and therefore the morale and retention, of Danish healthcare workers. Finally, Ruggieri (2009) reports that, compared to a strictly transactional (i.e., reward-and-punishment) leadership style, transformational leaders were associated with a higher rate of job satisfaction among people working on problem-solving tasks in virtual groups. Yet while transformational leadership is shown to be effective in certain commercially competitive and healthcare organisations, is it appropriate for an education system as well?

Empirical support from education
In the field of educational leadership studies, Kirby, Paradise and King (1992) investigated the behaviours of exemplary educational leaders. They quantitatively studied follower descriptions of "extraordinary" leaders for such characteristics as charisma and intellectual stimulation. The findings suggested that leadership which focuses on the development of subordinates is preferred over educational systems that involve contingent reward. There is also a series of studies showing that a leadership style emphasizing decentralised authority and subordinate development has positive influences on school culture and, eventually, learning outcomes. Leithwood and Jantzi (1990) studied the relationship between administrative strategies and collaborative school cultures. They found that various administrative policies focusing on staff development, communication of desirable philosophies and decentralised authority and responsibility could positively affect collaboration in order to enhance improvement initiatives. Later, Leithwood (1993) argued that evidence indicating a transformational style to instil school change is based largely on unpublished dissertation research, and that while transformation leadership seems to be supported in this regard, more research was necessary. More recently, Leithwood and Jantzi (1999) replicated their earlier study and found, as before, that transformational leadership policies had a strong influence on organisational culture, and furthermore, the findings also showed a modest positive influence on student engagement. A further investigation by Leithwood and Mascall (2008) of the influence of "collective" leadership on learning outcomes revealed a relationship between the two: transformational leadership styles that engender decentralised authority and collective responsibility among all stakeholders, including students and parents as well as teachers, had a positive relationship with the level of school achievement. Interestingly, the authors also point out that the influence of the principals seems to increase as they allow subordinates more authority.

Thus, there is considerable evidence that transformational leadership is effective in educational in general. This should not be surprising considering that the modern profession of education, like many modern commercial industries, is a dynamic field

demanding creativity and problem-solving skills. This is true, even when the socio-cultural context is not undergoing rapid technology-driven change. What, then, is the relationship between this leadership style and education as it exists in a context that is influenced more drastically by technological innovation?

Transformational leadership for education in the digital culture

Several authors have suggested a re-examination of educational leadership for the purpose of addressing 21st century educational needs. For these scholars, addressing the needs of the digital culture primarily means the successful integration of technology into pedagogy. Two decades ago in a remarkably prescient paper, Kearsley and Lynch (1992) attempted a prediction at how technology will change what is required of an educational system, and discussed how the administrative role would be influenced. They argued that the traditional training for educational administrators is inadequate to prepare future leaders because of the newness inherent in a technology-driven system. Later, Gurr (2004) discussed the notion of "e-leadership" and its role in the modern Australian educational system. The term seems, since the time of Gurr's writing, to have evolved to mean leadership in virtual groups, or groups wherein interaction is mediated strictly through electronic means (Avolio, Walumbwa, & Weber, 2009, p. 439). However, Gurr uses the term to refer to leadership in a context where technological permeation of society puts intense pressure on educational leaders to integrate digital technologies into school curricula. Writing from the standpoint of an educator in the field of business management, he argues that the rapid pace of technological development makes a digitally mediated educational environment too dynamic for traditional notions of educational leadership, which are too rigidly based on "leader-centricity." He states that change is too rapid and new information is introduced at such a rate that a single individual manager, operating based on standard systems and policies, simply cannot cope. "Formal" notions of the educational leader may even be detrimental to educational outcomes. Therefore, Gurr concludes that authority to act must be decentralised.

More recently, Sugar and Holloman (2009) describe the role of a technology leader in education as being extremely complex and dynamic. In addition to the formal role as technical expert, they argue that it is more important for a technology leader to be facilitative and concentrate on the development of others. Additionally, technology leadership involves transformational leadership traits such as promulgator of the organisational vision for technology use. Similarly, Collins and Halverson (2010) argue that technology amounts to a game-changer with regard to leadership in education. They claim that new emphases in the educational environment make technology leadership fundamentally different than traditional notions of educational leadership. Whereas traditionally leadership has been characterised by expert knowledge of established routines, it now must account for diversity and reliance on outside sources for knowledge. Also, according Townsend (2010), educational leaders themselves realise that change in education has been substantial, both because of newly introduced technological capabilities, and technology-driven cultural changes.

Some of the literature directed primarily at school administrators advocates for transformational leadership styles as a means of dealing with technology-driven change. Flanagan and Jacobsen (2003) examined the difficulties related to technology integration and offered an outline with which school principals could carry out new duties as leaders. They stress the need to create a vision and a context of support in order to facilitate teachers to act on their own initiative. Also, Dexter, Louis and Anderson (2009) emphasised the importance of team coordination in technology leadership. They

argued that a team-based leadership approach is necessary to facilitate an initiative to improve learning outcomes using technology. They further argued that the coordination of technology roles, whether principal, tech coordinator, teacher or IT director, is critical to the success of a tech program. Furthermore, the perceived need to rethink the role of educational administrator has led to the compilation of a list of principles purported to be suitable for education in a digital culture. The International Society for Technology in Education (ISTE) (iste.org) has put together standards for educational technology leaders. These standards are revised on a regular basis, with the latest version having been updated in 2009 as of this writing. The purpose of the core standards, titled National Education Technology Standards for Administrators (NETS-A), is to provide guidance to the educational technology leader. The NETS-A includes transformational leadership themes such as communicating a vision and empowering subordinates to act on their own. Finally, Overbay, Mollete and Vasu (2011) give advice for education administrators who are implementing new technology initiatives. They admonish school leaders to prioritise human relationships over the technology itself by listening carefully to teacher input and addressing their concerns. They also advise administrators to have a plan, but suggest that teachers must also participate in the planning stage in order to get an accurate picture of what technology will best fit the context, and to facilitate buy-in. Therefore, the overriding sentiment on leadership for education technology seems to focus on decentralising authority and enlisting the participation of all stakeholders.

In addition to the literature directed at administrators, there are also articles meant for teachers, calling on them to be more participative in leadership issues. Yee (2001) argues that educational leaders should consider teachers and students as their peers when dealing with technology uses in education. Similarly, Fullan (1993) talks about how teachers can be change agents and identifies certain guidelines that can attain "interactive professionalism," and Earle (2002) claims that teachers should be considered stakeholders in technology integration in order to engender the grassroots support necessary for success. He cited failure to do so as an obstacle to successful integration. Finally, Sherry and Gibson (2002) echo the sentiment that teachers must be empowered in order for technology integration to be successful, and outline several steps for them to become technology leaders in their own right.

Empirical support for transformational leadership in digital education
In support of the theoretical arguments, there are empirical studies suggesting the importance of technology leadership in education, and the efficacy of a transformational leadership style. Hughes and Zachariah (2001) investigated the roles and responsibilities of administrators, and the relationship between administrative leadership styles and the use of technology. They surveyed public school workers in Ohio and found that transformational leadership attributes positively influenced technology integration. Anderson and Dexter (2005) investigated the factors that impact the effectiveness of technology on learning, and concluded that school leadership is more important than other variables such as spending on infrastructure or the ratio of students to computer. Tan (2010) provides a meta-analysis of 12 empirical studies that examined the relationship between transformational leadership in schools, technology integration, and computer competency. She found that transformational leadership was associated with a higher level of technology integration and use. Hadjithoma-Garstka (2011) found that technology implementation was more widespread among teachers at schools where principals displayed a "people-first" approach to leadership rather than a "pacesetting" leadership style. Although this study did not investigate transformational leadership per se, the description of the more successful leadership style shared many qualities with descriptions of transformational or servant leadership styles, such as an emphasis on

human relationships, various types of support and encouragement for followers, and communication of a common vision. Peck et al. (2011) conducted a case study of a technology initiative at a high school in the United States. They found that there were some problems due to centralised pre-implementation planning, but that individual administrators and faculty members were quite adept at finding workarounds on their own initiative. Recommendations for administrators include more flexible planning and the encouragement of informal support networks to deal with the inevitable glitches. Dexter (2011a) investigated organisational arrangements and customs to determine the successful leadership practices of technological integration. She found that successful schools use teams rather than individuals responsible for technology integration, and predicted that "shared leadership" will characterise such programs. She concludes that the most important trait for a formal school administrator is to be a good communicator of a shared vision of technology integration because this contributes to a "recursive effect" that determines how teams perform. In a report on a technology implementation initiative at a school in Bombay, Luthra and Fochtman (2011) describe the use of tech leadership teams that included parents and students as well as teachers, and the encouragement of experimentation by these teams. They reported that often times teachers would learn from students, who tended to be more tech-savvy. Luthra and Fochtman conclude that the lesson learned from their experience is that no one individual can be a technology leader because no one individual has all the knowledge and experience necessary to make the full use of technology in education. Therefore, there is much evidence for the need to foster autonomy among followers, and create an organisational culture where each individual is motivated and capable of working toward a common goal.

Current state of leadership for educational technology

While the empirical evidence strongly indicates that a transformational leadership style can facilitate technology integration in an educational setting, the extent to which current educational leaders around the world adopt a transformational framework is uncertain. Are current school leaders equipped to cope with an educational environment that seems much more dynamic and challenging than what has traditionally been the case? What literature there is provides a mixed view. Banoglu (2011) measured the technology leadership skills of school principals and found that, in general, they showed a lack of planning and held unrealistic expectations of teachers with regard to technology use. Also, while their skills seemed adequate overall, they showed little evidence of vision, which can be considered important for successful technology leadership based on the previously cited literature. Sisman and Kurt (2011) investigated leadership qualities in Turkish elementary school principals with regard to educational technology. They used a survey to determine adherence to the NETS-A standards, and found that while scores were generally adequate, principals were strong in terms of vision but lacking in terms of support.

Others have pointed out that, despite the potent influence of digital culture on education, there is not enough technological preparation for educational leaders. For example, Schrum, Galizio and Ledesma (2011) investigated pre-service preparation and experience among American educational administrators with regard to technology, and found that most received little or no formal training in educational technology. In fact, they also discovered demonstrations of technological savvy and/or experience are not prerequisite to employment as an administrator or principal at the state level in 48 of the 50 United States, nor prerequisite in many cases at the institutional level. The participants in the study (who generally believed in the importance of integrating

technology in education, and were active in promoting such integration at their own institutions), were self-taught technology experts. Also, McLeod and Richardson (2011) reviewed popular academic journals and conference presentations in the field of education leadership in the United States over the past decade, and found that only a little more than two percent of the literature specifically addressed technology leadership. They argued that the field of educational technology leadership lacks a sufficient empirical base to adequately inform policy-making.

Discussion

The common theme suggested by the literature is that the traditional model of educational leadership is unworkable in the digital culture. Notions of the school administrator as the sole expert with the ability to devise and implement elaborate plans and policies to account for learning needs are outdated and harmful. First, it is unrealistic to expect that technological adaptation in education can be planned for adequately in advance. In an environment that is characterised by a propensity to change rapidly and often, there is a paucity of reliable precedence with which to construct a dependable plan for the future. Second, while there has been a traditional reliance on individual or small groups of managers as "experts," the pace of technological innovation has the effect of diminishing the difference between expert and novice. As Luthra and Fochtman (2011) note, students can be more knowledgeable about digital tools than teachers. Also, since there seem to be few requirements for technological savvy among administrators (Schrum et al, 2011) it is entirely possible that teachers can be more knowledgeable than administrators, or that administrators can be more knowledgeable than policy-makers higher up the governance ladder. Thus, in an environment characterised by newness, an expert on any issue may emerge at any level of an organisation. It is therefore unwise to rely solely on a small group of pre-designated individuals at the top to set policy, calling into question the entire concept of hierarchical or centralised organization.

This is an important insight because it deviates considerably from traditional (and still prevailing) notions of educational leadership. One discouraging example is that over the past 50 years there has been a gradual (and continuing) shift of authority in the United States toward "federalism" (Mitchell, Crowson, & Shipps, 2011). Federalism entails the concentration of educational decision-making authority at the federal level of government, with a corresponding loss of democratic empowerment at the state and local levels. This has led in many cases to schools that operate primarily under top-down mandates, where teachers are discouraged from participation in decision making (Darling-Hammond, 2010). Considering the above-reviewed literature on leadership in the modern educational context, this trend is most likely ill-advised.

Democratisation of educational systems is a logical replacement to centralised authoritative organisational structures. The evidence repeatedly shows that successful technological adaptation requires universal participation among stakeholders. In the case of the digital culture, students and teachers are at least on par with administrators as far as knowledge and experience, and therefore at least as qualified to contribute to policy-making. At the same time, to suggest a decentralised organisation is not to suggest a leaderless organisation. In order to function effectively, a group of individuals working toward a common goal must have coordination and guidance, otherwise there is no purpose for an organisation to exist in the first place. However, in lieu of an authoritative transactional leadership framework that is appropriate for a centralised, hierarchical organisation, a democratised educational system would benefit from transformational leadership. In a system wherein subordinates are expected to

participate pro-actively in decision making and act autonomously in implementation, leadership that emphasises the development of individual organisational members is indispensible for successful outcomes. Also, in a context characterised by innovation and change, it is necessary to encourage experimentation and risk-taking, as well as communication between individual members of the organisation so that learning and growth are fostered, and members are better able to coordinate their efforts. This is not to mention the fact that an innovative environment entails a demand for creative problem-solving, or simply just for creativity in general. As the evidence suggests, a transformational leadership style is more engendering of creativity than the traditional alternative. Finally, the transformational leader is tasked with the duty of clarifying organisational goals, and ensuring that all members understand them. This helps prevent conflicting and paradoxical action in an organisation where members work for the most part independently.

Conclusion

This paper has reviewed literature outlining historical socio-economic conditions that influence the leadership and organisational styles of educational systems, and introduced the theoretical concept of transformational leadership as an appropriate framework for the modern educational context. It was argued that the influence of the digital culture on education makes it dynamic and fast-changing field, so rigid traditional models of leadership that emphasise the delegation of routines should be discarded for more fluid leadership frameworks that emphasise communication and human relationships. This entails moving away from a leader-centric organisational framework toward a decentralised model. Yet, despite what type of leadership style that organisational theorists and researchers purport to be desirable, in reality transformational leadership is most likely not adopted universally. It is therefore hoped that this paper will prove useful for practitioners and researchers to better understand the organisational structures in which they work, and for those in positions of authority to better understand which type of leadership may work for their institutions.

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