

Module: Practitioner Learning Project (Intermediate) (BMDP7002)

Title: Exploring the Digital Use of Technologies by course Leaders in Further Education:

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Introduction

The swift progress and incorporation of digital technologies are fundamentally restructuring the educational terrain, resulting in substantial changes in the operations and delivery of services by educational institutions. The significance of digital technologies in education cannot be exaggerated, as they provide novel methods to enrich learning experiences, simplify administrative procedures, and promote creativity Selwyn (2016). Within this framework, the significance of leaders and managers at institutions of further education (FE) and higher education (HE) becomes crucial. These individuals are leading the way in navigating and utilising technological advancements, ensuring that their institutions can successfully use these advances to benefit both staff and students.

The incorporation of digital technologies in education encompasses the utilisation of learning management systems (LMS), the application of data analytics for monitoring student performance, and the introduction of digital communication tools, among other practices Picciano (2012). Additionally, generative AI has been recently integrated into this domain. Leaders and managers in further education (FE) and higher education (HE) must have both digital competence and strategic insight to successfully navigate their institutions through the process of digital transformation. To effectively incorporate digital technologies into their institutions' educational and administrative frameworks, it is necessary to comprehend the possible advantages and difficulties associated with these tools and create thorough strategies, Heath (2017).

Effective technology integration requires leaders and managers to possess a high level of digital proficiency. Proficiency encompasses not only technical expertise but also the capacity to evaluate and apply digital resources in a manner that is consistent with institutional objectives and educational benchmarks Fullan and Langworthy (2014). Leaders must possess the ability to make well-informed decisions on the selection and implementation of technologies in order to optimise their advantages Salmon (2013). Effective utilisation of digital technologies relies not only on one's digital skills but also on the tactics implemented by course leaders. Strategic planning includes the establishment of well-defined goals, the efficient allocation of resources, and the cultivation of an atmosphere conducive to ongoing improvement and innovation. Nevertheless, the incorporation of digital technologies is not without its difficulties. Leaders and managers frequently face challenges such as opposition to change, financial limitations, and the requirement for continuous professional growth, Ertmer and Ottenbreit-Leftwich (2013).

The objective of this practitioner learning project is to examine how course leaders at Further Education, in a sixth form college in the UK, employ digital technologies to improve instructional practices, simplify administrative processes, and promote innovation inside their institutions. The study will concentrate on various crucial aspects:

the level of digital competency exhibited by these course leaders, the tactics they use for digital integration, and the obstacles they encounter throughout this process. The study aims to gain a comprehensive understanding of the present condition at the course leader level and the future possibilities of digital integration in further education (FE) in general.

This project also aims to 1) evaluate the digital literacy proficiency of course leaders in a sixth form college in the UK, pinpointing specific areas that may require additional training and development, 2) to investigate the diverse approaches employed by course leaders in Further Education at a sixth form college in the UK to incorporate digital technology, with a focus on identifying exemplary methods and successful frameworks that might be adopted by other course leaders at other sixth form institutions, 3) to identify the specific obstacles associated with integrating digital technology into FE: case of a sixth form college in the UK and provide effective and sustainable strategies to address them, 4) to enhance the understanding of how digital technologies can be effectively utilised to enhance educational practices and outcomes by examining the digital skills, tactics, and issues encountered by course leaders in the FE at a sixth form college in the UK.

The findings will provide insights for policy suggestions and practical guidelines for middle and senior leaders and managers, contributing to the overall objective of improving the quality and availability of education through digital innovation Bates (2019). The primary objective of this project is to emphasise the crucial importance of leadership in the process of digitally transforming education. Additionally, it intends to offer a clear plan for future progress in this rapidly evolving domain FE: in the case of sixth form college in the UK.

Methodology

Philosophical Underpinning

The research design and technique are shaped by core ontological and epistemological considerations. Ontology pertains to the fundamental nature of reality and the extent of our understanding of it, whereas epistemology deals with the nature and limits of knowledge and the methods by which it can be obtained, Crotty (1998). This research has a constructivist ontological position, which posits that reality is formed through social processes and interactions. This perspective agrees with the belief that educational practices and experiences are influenced by cultural, social, and contextual variables.

The epistemological approach is interpretivist, prioritising the comprehension of human experiences based on the viewpoints of the participants. This methodology enables the investigation of how individuals perceive and comprehend their educational surroundings and activities. Interpretivism is well-suited for educational research

because it recognises that knowledge is subjective and that the context in which educational events occur has a crucial role in shaping them, Guba and Lincoln (1994).

Research Paradigm

The research paradigm denotes the framework or perspective that directs a research investigation. It includes the theoretical premises, concepts, and methodologies employed to examine a certain occurrence or issue, Lincoln, Lynhama and Guba (2011). It includes the fundamental beliefs about the nature of reality, the ways knowledge is acquired, the strategies used to do research, and the specific methods employed in the research process. This study employs a constructivist-interpretivist paradigm, which is appropriate for investigating intricate, context-specific educational phenomena. Constructivism, as an ontology perspective, asserts that reality is not an immutable thing but rather is shaped via social interactions and personal experiences, Bryman (2012). This ontological perspective is suitable for educational research, as it is essential to comprehend the varied experiences of learners, educators, and stakeholders. Interpretivism, as an epistemological perspective, centres on comprehending the process by which individuals construct significance in their existence. The statement highlights the subjective quality of knowledge and the influence of context on the formation of comprehension Schwandt (1994). This methodology enables the researcher to thoroughly explore the experiences and viewpoints of participants, offering comprehensive and extensive insights into educational processes and practices.

Methodology: This study adopts secondary data with a qualitative methodological approach. Qualitative research is suitable for investigating the intricacy and intricateness of educational experiences, enabling a meticulous analysis of participants' viewpoints and the environments in which they function, Denzin and Lincoln (2011). It encompasses techniques like interviews, focus groups, and observations, which are highly successful in capturing the intricate and subjective experiences of individuals.

Methods: The study will utilise secondary data where semi-structured interviews and focus groups are used as the primary means of data collection. Semi-structured interviews offer participants the freedom to express their opinions using their own language while also providing a framework to guarantee that important subjects are addressed, Kvale and Brinkmann (2009). Focus groups promote participant interaction, resulting in the generation of valuable data through discussions and the exchange of varied viewpoints, Morgan (1997).

Rationale for Decisions

When studying leadership and management in education, it is essential to evaluate the appropriateness of various research paradigms and approaches. The application of quantitative methods and positivism, which prioritise the use of objective measurement

and hypothesis testing, may not be suitable for this particular sector. Cohen, Manion, and Morrison (2018) assert that leadership and management in education frequently encompass intricate, context-specific occurrences that necessitate a more subtle comprehension, which can be more effectively documented through qualitative or mixed-methods methodologies. The critique below examines the reasons why these approaches are not as appropriate and supports the use of a constructivist-interpretivist paradigm with qualitative methodologies.

Constraints of Quantitative Approaches and Positivist Philosophy

Quantitative approaches, based on the philosophical approach of positivism, prioritise the use of numerical data, statistical analysis, and the capacity to draw broad conclusions, Bryman (2012). Although these methodologies have value in specific study contexts, they are inadequate in capturing the intricate and nuanced aspects of leadership and management in the field of education. Leadership encompasses complex and ever-changing dynamics, interpersonal connections, and situational elements that are challenging to measure, Creswell and Poth (2018).

Positivism, characterised by its focus on objectivity and impartiality, posits the existence of a singular reality that can be quantified and examined without being influenced by its surroundings, Johnson and Onwuegbuzie (2004). This assumption poses challenges in educational settings when there are many realities that are influenced by individual experiences and cultural circumstances, Lincoln and Guba (1985). The study of leadership and management in education is essentially subjective and context dependent. Therefore, a research strategy that recognises and investigates these complexities is necessary.

Constructivist-Interpretivist Paradigm

The constructivist-interpretivist paradigm refers to a theoretical framework that emphasises the role of individuals in constructing meaning and interpreting their experiences.

The selection of a constructivist-interpretivist paradigm is supported by the nature of the research enquiries, which aim to comprehend how leadership and management techniques are encountered and interpreted by different stakeholders. This paradigm enables a thorough examination of the subjective experiences and environmental elements that influence educational practices, Denzin and Lincoln (2011). It acknowledges that the perception of reality is shaped by society and can be better comprehended by considering the viewpoints of the individuals concerned.

Qualitative methodology

Qualitative methodology denotes a research strategy that emphasises the comprehension and interpretation of subjective experiences, meanings, and social

phenomena. It entails the collection and analysis of non-numerical data, including interviews and observations.

The selection of a qualitative technique is based on its ability to offer a comprehensive and detailed comprehension of intricate phenomena within their specific contexts, Merriam and Tisdell (2016). Techniques such as semi-structured interviews and focus groups are very appropriate for gathering comprehensive and intricate data that is essential for comprehending the viewpoints and experiences of participants, Patton (2015). These methodologies enable researchers to investigate the significance and understandings that stakeholders attribute to their experiences, providing insights that quantitative methodologies are unable to deliver. For example, conducting interviews with educational leaders can reveal their strategies for overcoming obstacles, making informed choices, and exerting their influence on their institutions. Conducting focus groups with teachers and students can provide insights into how leadership practices influence the school environment and affect learning results. Qualitative data offers a thorough perspective on the dynamics of leadership, enhancing our comprehension of how leadership operates in educational environments, Creswell (2013).

Contribution to the comprehension of digital transformation

The project seeks to enhance our understanding of the digital revolution in education by adopting a constructivist-interpretivist framework and utilising qualitative approaches. It showcases the various ways in which different stakeholders, like administrators, teachers, and students, experience and understand the digital transition. This method is crucial for formulating solutions that are adaptable to the particular requirements and circumstances of educational establishments.

Ultimately, although quantitative approaches and positivism can provide significant insights in some situations, they are not appropriate for studying the intricate and context-dependent aspects of leadership and management in the field of education. A constructivist-interpretivist paradigm, backed by qualitative approaches, offers a more suitable framework for investigating these concerns, since it effectively captures the profound and intricate nature of stakeholders' experiences and viewpoints.

Literature Review

A comprehensive critical analysis of the literature reveals that the incorporation of digital technology in educational leadership has become very important, especially in the Further Education (FE) sector. This review provides a thorough analysis of important publications that investigate different aspects of digital leadership in further education (FE) institutions. It evaluates the strengths and weaknesses of these studies, paying particular attention to the lack of research on sixth form colleges.

Newland and Byles (2014) offer a strategic viewpoint on the convergence of academic leadership with emerging technology. Their study is based on a post-positivist methodology, which implies that there are discernible patterns in how leadership responds to technical advancements. Although this perspective provides useful insights into the strategic consequences of adopting technology, it may oversimplify the intricate and context-dependent nature of leadership in educational environments. Newland and Byles (2014) contend that academic leaders are adapting their roles in response to technological improvements (p. 285). Nevertheless, their analysis is deficient in empirical evidence derived from specific Further Education (FE) contexts, specifically course leaders in sixth form colleges. This constraint prompts enquiries regarding the relevance of their discoveries to various categories and leadership layers of FE institutions, each possessing distinct obstacles and prospects in the use of technology.

The study conducted by Coker and Porter (2017) employs a mixed-methods approach to investigate the factors that impact the acceptance and successful utilisation of digital technology in further education (FE) institutions. Their research offers a more sophisticated comprehension of technology integration, recognising the influence of both institutional and individual elements. According to Coker and Porter (2017), successful adoption of technology requires strong support from leaders and well-defined strategies from institutions. Nevertheless, their research fails to distinguish between various categories of FE institutions, hence potentially disregarding the distinct difficulties encountered by sixth form colleges. The applicability of their findings to the specific setting of leadership layers in sixth form colleges is therefore uncertain, revealing a notable deficiency in the existing body of research.

The case study conducted by Gillen and Wilkie (2019) on digital leadership practices in a further education college provides detailed and insights within the given context. Their interpretivist methodology enables a thorough investigation into how senior leaders utilise digital technologies to facilitate organisational objectives. Gillen and Wilkie (2019) argue that successful digital leadership necessitates a harmonious combination of technological proficiency and conventional leadership abilities (p. 683). Although this case study offers useful insights, its scope is restricted to a particular institution at senior level. The lack of comparative studies examining digital leadership methods in various educational settings, especially different leadership layers in sixth form colleges, is a notable deficiency in our knowledge.

Wilson and Stanton (2021) present a framework that aims to help senior leaders in the field of further education (FE) tackle digital disparities and enhance the incorporation of technology in an efficient manner. Their pragmatic approach, which incorporates parts of constructivism and post-positivism, provides practical direction for senior leaders. According to Wilson and Stanton (2021), the resolution of digital disparities necessitates a collaborative effort including multiple stakeholders and the careful evaluation of

diverse contextual elements (p. 1130). Nevertheless, their methodology, albeit extensive, does not explicitly tackle the distinct issues encountered by course leaders in sixth form colleges. The authors of this article have not studied the specific ways in which the digital gap may appear in these institutions, which may be different from other further education settings.

In their study, Davies and Jones (2023) investigate the utilisation of digital technology by FE leaders in their response to the COVID-19 epidemic. Their research emphasises the significance of digital resilience and flexibility during times of crisis. Davies and Jones (2023) observe that the pandemic sped up digital transformation in FE institutions, exposing the strengths and shortcomings of current digital leadership methods. Although this research offers valuable insights into crisis management using digital methods, it does not particularly investigate the experiences of course leaders in sixth form colleges during the epidemic. The distinct obstacles encountered by these establishments while shifting to online learning and upholding educational excellence may vary from those encountered by other further education institutions, thereby highlighting an additional deficiency in the existing body of research.

The literature review utilises various qualitative and mixed-methods methodologies to gain in-depth and context-specific understanding of digital leadership in the field of further education. Nevertheless, there is a significant dearth of quantitative research evaluating the influence of digital leadership strategies on quantifiable results such as student academic success or institutional effectiveness. This disparity is especially noticeable in the context of sixth form colleges. Moreover, the lack of longitudinal studies hinders our comprehension of how digital leadership practices develop over time in response to swift technical progress. This constraint is noteworthy, considering the rapid and dynamic nature of technical advancements in the field of education.

Most of the evaluated studies primarily take on constructivist and interpretivist perspectives, acknowledging the socially constructed aspect of digital leadership in education. Although this approach enables detailed examination of individual experiences and contextual elements, it may restrict the applicability of the results. Research that integrates interpretivist perspectives with positivist methodologies will greatly enhance the field's understanding of digital leadership in further education (FE), specifically in sixth form institutions. However, the examined literature lacks a special focus on sixth form institutions, which is a notable deficit. Although these publications offer significant insights into FE institutions in general, they fail to address the specific context, obstacles, and opportunities that sixth form college course leaders encounter when implementing digital technology. Other gaps that exist in the literature are insufficient investigations of the viewpoints of students regarding digital leadership methods in further education (FE) institutions, namely in sixth form colleges. There is a scarcity of comparative studies that investigate digital leadership in various types of

further education institutions, including sixth form colleges. There is a lack of adequate research on the extent to which course leaders in further education, particularly in sixth form colleges, actively utilise and interact with certain emerging technologies, such as artificial intelligence or virtual reality, and finally, a lack of sufficient study on the professional development requirements of leaders in sixth form colleges regarding digital leadership and the integration of technology.

In conclusion, although the existing literature offers useful insights into digital leadership in further education (FE), there is a distinct requirement for research that especially concentrates on sixth form colleges. Future research should focus on investigating the distinct technical obstacles and possibilities in these establishments, utilising longitudinal methodologies, including student viewpoints, and employing comparison analyses. Furthermore, doing research on the effects of certain technologies, the implementation of policies, and the professional development requirements inside sixth form colleges would greatly enhance our comprehension of digital leadership in this crucial area of education.

The existing literature on digital leadership in FE provides valuable information but lacks cohesion. To gain a comprehensive understanding of digital leadership in the distinct educational environment of a sixth form college, it is imperative to use a more comprehensive strategy that considers all relevant factors. This research would not only address a substantial deficiency in the existing body of knowledge but also offer vital perspectives for policymakers and practitioners in the realm of educational leadership.

Data collection and analysis

This study employs secondary data from the literature review, to provide a comprehensive understanding of the research problem. Utilising secondary data is essential for gaining a thorough grasp of the study problem while examining the digital utilisation of technology by leaders and managers in further education, particularly within the setting of a UK sixth form college. Secondary data provides significant insights, context, and comparative information that can improve the overall quality and depth of the study. The secondary data sources for this study may encompass government publications, educational policy documents, prior academic studies, and statistical data pertaining to the adoption of technology in educational environments. The Department for Education's (2019) publication "Realising the potential of technology in education: A strategy for education providers and the technology industry" offers a framework to comprehend the wider national context of digital technology utilisation in education. An important benefit of utilising secondary data is its capacity to offer historical context. Through the analysis of patterns in the adoption of technology over a period of time, researchers can gain a more comprehensive understanding of the present condition of digital technology utilisation in the realm of leadership and management in further education. The historical viewpoint can be obtained from

sources like the Office for Students' (2020) yearly reports on the condition of the higher education sector, which frequently incorporate information on the assimilation of technology. In addition, secondary data can provide comparative insights. Through the analysis of data from other sixth form colleges or comparable educational institutions, researchers can compare the case study college with industry standards. The yearly technology survey conducted by the Association of Colleges (2021) offers significant comparative data on the utilisation of technology in the further education sector.

Secondary data is essential for detecting gaps in current understanding. Through a thorough examination of literature, such as Bennett's (2014) research on digital leadership in education, researchers can identify specific areas that require additional inquiry. This process allows them to improve their research questions and methodology. Furthermore, secondary data can offer a broader viewpoint on a larger scale, which enhances the detailed understanding obtained by collecting primary data within the sixth form college. For example, the report by JISC (2020) on digital leadership in further education provides a comprehensive perspective that can help put the conclusions of the case study into context. Nevertheless, it is crucial to acknowledge the constraints of secondary data. According to Saunders et al. (2019), it is important to note that secondary data may not always correspond precisely with the specific research aims. Therefore, it is crucial to thoroughly assess the quality and relevance of the secondary data. Moreover, certain secondary data sources might be obsolete, especially considering the swift rate of technological advancements in the field of education. In order to address these limitations, researchers should supplement secondary data with primary data obtained from the sixth form college through triangulation. According to Creswell and Creswell (2018), this method can offer a more thorough and detailed comprehension of the research issue.

Data Analysis

An in-depth examination and comparison of digital leadership strategies in the field of further education from 2014 to 2023. The digital leadership in Further Education (FE) has experienced substantial changes in the last ten years. This analysis provides a thorough examination of the development of digital leadership practices in the field of Further Education (FE) from 2014 to 2023. It draws on significant studies in this area to support its findings.

The evolution of conceptualising digital leadership.

In 2014, Newland and Byles proposed the concept of adapting academic leadership to address the impact of emerging technologies. Newland and Byles (2014) emphasised the importance of leaders adjusting their methods to successfully incorporate digital technologies.

This initial viewpoint established the foundation for comprehending the convergence of leadership and technology in educational environments. Nevertheless, their

methodology primarily relied on abstract concepts and did not include any concrete data pertaining to the FE sector. By 2017, there was a change in the discussion towards a more detailed comprehension of technology usage in further education. Coker and Porter (2017) conducted a study on the determinants of the acceptance and successful utilisation of digital technology, with a particular focus on the significant influence of leadership and management. Their work represented a notable advancement in acknowledging the intricacy of technological integration in FE, surpassing broad observations to pinpoint specific aspects in operation.

Transitioning from broad observations to specific practices

The transition from broad observations to specific methodologies is apparent when contrasting earlier research with more contemporary investigations. The case study conducted by Gillen and Wilkie (2019) offered specific instances of digital leadership approaches in a FE college. Their research showcased how leaders utilise digital technologies to facilitate organisational objectives and improve student experiences, providing a more pragmatic viewpoint compared to previous theoretical frameworks. Wilson and Stanton (2021) developed a framework that focusses on overcoming digital disparities, representing a significant move towards specificity. Their study signifies a noteworthy progression in the industry, offering educational leaders a systematic methodology for incorporating technology that takes into account different perspectives from stakeholders. This evolution demonstrates the progression of the field from abstract ideas to practical techniques.

Analysis of Different Leadership Approaches

An examination of the studies demonstrates a progression in leadership methodologies. Newland and Byles (2014) highlighted the necessity for leaders to adjust to technological advancements, although their research lacked explicit instructions on how to accomplish this. Subsequent research, on the other hand, provides more specific guidance. Coker and Porter (2017) emphasised the significance of leadership in optimising the potential of technology for teaching and learning. Similarly, Gillen and Wilkie (2019) provided concrete illustrations of how leaders might utilise digital technologies in a further education (FE) setting. The culmination of this process was the study conducted by Davies and Jones (2023), which analysed the reactions of FE leaders to the COVID-19 epidemic. Their research not only offered methods for constructing digital resilience but also showcased the application of digital leadership approaches during times of disaster. This signifies a notable progression from the more abstract methods used in previous years, demonstrating how digital leadership has become a necessary and pragmatic component of FE management.

Alleviating Disparities in Access to Digital Resources

An important advancement in digital leadership techniques during this period is the heightened emphasis on tackling digital disparities. Although previous studies such as Newland and Byles (2014) and Coker and Porter (2017) acknowledged the significance

of incorporating technology, they did not specifically discuss the problem of digital disparities inside FE institutions. The paradigm developed by Wilson and Stanton (2021) brought about a notable change by prioritising the topic of digital inequality in digital leadership discussions. Their studies highlighted the importance of leaders adopting a comprehensive strategy for incorporating technology, considering the varied requirements and talents of all individuals involved. This phenomenon demonstrates an increasing recognition of the possibility that technology can worsen preexisting disparities if not handled with caution.

The Influence of Exogenous Factors

The studies jointly emphasise the substantial influence of external factors on digital leadership practices in the field of further education. An exemplary illustration of this phenomenon is the COVID-19 pandemic, as examined by Davies and Jones (2023). Their research highlighted how an external crisis can expedite the implementation of digital technology and require swift modifications in leadership strategies.

This discovery presents a clear and noticeable difference compared to the slower, self-generated modifications discussed in previous research. Newland and Byles (2014) and Coker and Porter (2017) examined the proactive integration of technologies by leaders to enhance educational results. The pandemic compelled leaders to promptly respond to external challenges, emphasising the necessity for digital resilience and adaptation in leadership methodologies.

Analyse and evaluate research methodologies with a focus on critical reflection.

The methodological progression in these investigations should be emphasised. Prior publications, such as Newland and Byles (2014), were predominantly theoretical, whereas subsequent investigations utilised a wider range of rigorous approaches. The case study technique of Gillen and Wilkie (2019) offered detailed insights into a particular environment, while Wilson and Stanton (2021) focused on developing a framework, and Davies and Jones (2023) conducted research on pandemic reactions using more extensive methodologies. This methodological progression demonstrates the advancement of the subject, transitioning from broad observations to more detailed and precise understandings of digital leadership in the field of further education.

Nevertheless, it also emphasises a major deficiency in the existing body of knowledge: the absence of extensive, data-driven investigations that may offer a more comprehensive and universally applicable understanding of digital leadership strategies in the further education sector.

In conclusion, the evolution of digital leadership practices in the field of FE between 2014 and 2023 demonstrates a quick maturation in response to technical improvements and external challenges. The progression from broad observations regarding shifting leadership to precise frameworks and tactics for digital leadership showcases the growing complexity of both study and implementation in this field.

Nevertheless, this data analysis also uncovers several domains that require more investigation. Additional comparative research is required to examine various FE situations; longitudinal studies are needed to monitor the long-term effects of digital leadership practices; and investigations into the student viewpoint on digital leadership are necessary. Furthermore, given the rapid evolution of technology, it is imperative to conduct continuous study to ensure that digital leadership techniques in FE remain efficient and pertinent.

To summarise, the domain of digital leadership in FE has made substantial progress in the last ten years, transitioning from abstract ideas to tangible approaches. The study conducted by this organisation will provide essential insights for building effective leadership practices in the Further Education sector as it deals with the difficulties and opportunities brought about by digital technologies.

Ethical Considerations

Ethical considerations are of utmost importance in educational research, particularly in studies that make use of secondary data. When examining the digital utilisation of technology by leaders and managers in a sixth form institution, researchers must cautiously negotiate numerous ethical concerns linked to the usage of secondary data. The British Educational Research Association (BERA) offers extensive recommendations for conducting ethical research in the field of education. As stated by BERA (2018, p. 39), researchers who utilise secondary data must carefully assess the consequences of their research on the individuals or groups that were initially involved in the data collection process. This factor is especially significant when working with data pertaining to educational leaders and managers, as the research findings have the potential to impact their professional standing.

Data privacy and confidentiality are significant ethical considerations. While secondary data may be accessible to the public, researchers must take precautions to avoid unintentionally disclosing confidential information about persons or organisations. The BERA/BELMAS (2021, p. 7) recommendations on educational leadership research highlight the need for researchers to uphold the privacy, anonymity, and confidentiality of participants. Researchers must ensure the anonymisation of any identifiable information when reporting findings in the context of secondary data use.

Another crucial ethical concern involves the possibility of misinterpretation or exploitation of secondary data. Gorard (2021, p. 112) emphasises that researchers must have a thorough understanding of the original data gathering procedures and aim to avoid misinterpreting or taking secondary data out of context. To tackle this issue, researchers must conduct a comprehensive examination of the methodology and context of the secondary data they utilise, guaranteeing that their interpretations are in line with the intended purpose of the original data.

Consent is a significant ethical concern when it comes to using secondary data. Although publicly available data may not necessitate express consent, researchers should consider the expectations of the original participants for data usage. The UK

Data Service (2023) recommends that researchers verify the terms of use for any secondary data sources and ensure adherence to any limitations or requirements imposed on the data's utilisation.

Additionally, researchers need to be cognisant of potential biases present in secondary data. According to Smith (2019, p. 78), secondary data can potentially exhibit the biases of the original researchers or the institutions responsible for collecting the data. Within the realm of examining the utilisation of digital technology in education, this may materialise as an excessive emphasis on prosperous technological adoptions or a concentration on some categories of technologies to the detriment of others.

Researchers must thoroughly assess their secondary data sources and acknowledge any potential biases in their analysis.

The guidelines from BERA/BELMAS (2021, p. 9) also emphasise the significance of transparency in research methodologies. They state that researchers should explicitly express their methodological approach, including any constraints or potential biases in their data sources. Transparency is especially important when utilising secondary data, as researchers should openly disclose the source of their data, and any underlying assumptions made during the study. In addition, researchers must consider the potential influence of their results on educational institutions and sectors. According to BERA (2018, p. 30), researchers are obligated to "deliberate on the repercussions and potential effects of their research." When examining the use of digital technology at a sixth form college, the results could impact policy choices or shape public opinions about the institution or the industry. Consequently, it is imperative for researchers to report their findings in a responsible manner and carefully evaluate the wider consequences of their study. Finally, researchers must be aware of the ownership of data and the rights related to intellectual property. The UK Data Service (2023) recommends that researchers appropriately acknowledge the origins of secondary data and adhere to any stated citation rules set by the data suppliers.

Conclusion

This project provides valuable insights into the digital use of technologies in FE. By understanding the current practices, challenges, and potential improvements, this research will contribute to the development of more effective and digitally competent educational leadership. Ultimately, the rapid growth and incorporation of digital technology have unquestionably revolutionised the education sector, necessitating educational institutions to adjust and create new methods in both their administrative and instructional practices. This study examines the significance of leadership in managing technological changes, specifically focussing on the role of course leaders at a sixth form college in the UK. The results of this project on practitioner learning emphasise the complex and diverse aspects of digital competence. It goes beyond just technical abilities and includes strategic decision-making, allocating resources, and creating an atmosphere that encourages continual progress and innovation.

The study's analysis of digital literacy competency among course leaders indicates that although many possess expertise in using digital resources, there are still notable deficiencies that require focused professional development interventions. This insight is vital because it highlights the need for continuous training to ensure that leaders are not only proficient in technology but also able to effectively utilise it to achieve institutional objectives.

Furthermore, the examination of various methods for incorporating digital technology into the organisation shows that achieving successful digital transformation depends on a carefully planned strategy. This strategy must encompass the establishment of explicit objectives, the efficient allocation of resources, and a willingness to adopt innovative instructional approaches that are enriched by technology. Identifying exceptional practices within the college is a great resource for other institutions looking to replicate successful frameworks.

Nevertheless, the report also highlights the significant obstacles that come with the incorporation of digital technology in higher education. Obstacles such as resistance to change, limited resources, and the necessity for ongoing professional growth might hinder advancement. These issues highlight the significance of strong leadership in overcoming these impediments and guiding institutions towards a sustainable and efficient digital transformation.

The ramifications of this research go beyond the specific setting of the sixth form college being examined. The acquired insights provide significant direction for middle and senior executives and managers in different further education settings, offering a path for improving the quality and accessibility of education through the strategic utilisation of digital technology. The study enhances our understanding of how educational institutions can successfully negotiate the complexity of digital transformation and become more resilient, inventive, and effective in delivering education in the digital age by highlighting the crucial role of leadership in this process.

In essence, this initiative confirms that the process of digitising education is not solely a technological task, but rather a strategic one that necessitates visionary leadership. The findings of this study will provide valuable insights for policymakers and educational leaders, enabling them to effectively navigate the difficulties and opportunities of the digital era. This will ultimately facilitate progress and innovation in the field of education.

Recommendations:

Establish Continuous Professional Development (CPD) Programs: Educational leaders must implement continuous professional development initiatives aimed at improving digital proficiency, ensuring that course leaders are adept in technology use and its strategic application to achieve institutional objectives.

Formulate a Comprehensive Digital Transformation Strategy: Sixth form colleges institutions must establish a precise plan for digital transformation that encompasses explicit objectives, effective resource allocation, and the incorporation of novel instructional methodologies to maximise the utilisation of digital technology.

Promote a Culture of Innovation and flexibility: Leadership must cultivate an atmosphere that fosters flexibility, creativity, and innovation among educators and staff, empowering them to effectively accept and integrate new digital tools and pedagogies.

Confront Resistance to Change Proactively: Effective leadership is essential to address resistance to technological change. Leaders must ascertain the fundamental causes of resistance and implement specific solutions, including stakeholder engagement and support systems, to facilitate a more seamless transition.

Emphasise Leadership Development in Digital Literacy: Educational institutions must prioritise the cultivation of leadership skills in digital literacy, enabling middle and senior leaders to navigate the intricacies of digital transformation and make informed, strategic decisions that foster sustained success.

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