

# **Influence of School Administrators' Digital Competence on Teachers' Job Commitment in Public Secondary Schools in Morogoro Municipality, Tanzania**

**ABSTRACT:** *This study investigated the influence of school administrators' digital competence on teachers' job commitment in public secondary schools in Morogoro Municipality, Tanzania. The study adopted a pragmatic and convergent design under a mixed research approach. The sample size was 140 participants, comprising 10 public secondary school administrators and 130 teachers. Whereby purposive samplings were used to get the representatives. Questionnaires and interviews were employed to get the data. Similarly, research experts validated the instruments. The data were analyzed quantitatively using descriptive statistics and thematic analysis for qualitative data. Before actual data analysis, a pilot study was conducted to establish data reliability. The results showed that the digital competence of school administrators has impacted the job commitment of teachers working in the public secondary schools since it facilitated professional growth, teamwork, and the maintenance of a favorable environment and teacher motivation. The study recommended that MoEST should provide training, policy guidance, and digital resources to ensure that secondary school administrators are digitally competent and able to lead effectively.*

**Keywords:** *Digital competence, School administrators, Teachers' job commitment, Public secondary schools.*

## **Introduction**

Digital competence and job commitment by teachers have been a research topic of interest regarding influence by school administrators in just a few selected public secondary schools in Morogoro Municipality. Researchers have also highlighted the impact of the digital competence of administrators in relation to the commitment of teachers to their jobs. Another example is the

study by Ogundolire (2020), which is dedicated to the explanation of the connection between the digital competence of school administrators and the job commitment of teachers based on the context of technical and vocational education in Nigeria. Besides, the earlier research is based on the UNESCO model of ICT competency, which focuses on the importance of incorporating technology in the learning and teaching process in order to improve both.

In Spain, Gisbert et al. (2022) demonstrate that the digital competence of school administrators is crucial for influencing both the digital competence and professional growth of teachers; furthermore, the high level of digital leadership among these administrators enables teachers to improve their performance and effectively integrate digital technologies into their teaching, resulting in increased loyalty to work and motivation. In addition, the digital skills of administrators would allow them to offer the required vision, resources, and encouragement to teachers to build their digital skills and establish teamwork and digital competence within school settings.

Technology has shaped the study by Fulgence (2020), in Tanzania, which aims to aid in the formulation of digital fluency among the teacher educators in the Tanzanian schools. Additionally, the study identifies that school administrators have a contribution towards the capabilities of teachers to use technology in instruction, which can lead to commitment to their job by promoting professional growth and motivation through suggesting continued training and encouragement by school administrators on the issues of improving their competence in digital technology, since their influence on teachers is large in terms of motivation to their jobs in their respective regions.

### **Statement of the Problem**

Studies have pointed out that the digital competence of an effective school administrator can develop a positive relationship with job commitment. As an example, the study by Olofsson et al. (2020) provides that effective school administrators do not simply involve the ability to work with technology but imply the need to have a better comprehension of its pedagogical consequences and specific application in the education environment. In a similar manner, an investigation conducted by Rubach and Lazarides (2021) suggests that teachers' belief in their competency with ICT holds a significant value in determining whether they are willing to incorporate the use of technology into their practice. In case there is a sense of competency about the digital skills of teachers, it is more likely that they would acquire innovative teaching approaches involving the use of technology. Nonetheless, there is scanty information in regard to the role that might be played by the school administrators with regard to digital competence and their subsequent impact on the job commitment of the teachers in the secondary schools of Morogoro Municipality. Higher rates of investigations have not been carried out on the impacts of school administrators' competences on the attitude of teachers towards their jobs. This research study has not been done in secondary schools, especially in Morogoro Municipality. Consequently, this study would contribute to bridging the gap in the literature by examining how the digital competence of school administrators affects the job commitment of teachers among the teachers in Morogoro municipality who work in the public secondary school.

### **Significant of the Study**

The research can guide the national and local policymakers and curriculum designers. The findings of the research would influence policy decision-making efforts in the education system by identifying the problems it faces and demonstrating effective solutions. The proposed study

would contribute to the body of literature regarding the impact of the professional digital competences of the administrators on the job commitment of the teachers in Tanzania with respect to the particular setting in Morogoro Municipality. The study would add more insight into the factors that affect digital competences and the job commitment of teachers. Educational researchers, practitioners, and policymakers would find this knowledge useful in enhancing digital skills in the same circumstances. The research itself would provide a basis on which potential researchers can explore further on the specific areas and develop new concepts of handling the issues confronting public secondary teachers not only in Morogoro municipality but also in the rest of the country.

### **Theoretical Framework**

This study applied the diffusion of innovation theory, formulated by Everett Rogers in 1962, describes how any new idea, technology, or innovation spreads in a group or society and the pace at which this spread occurs. The theory of diffusion of innovation is important as it provided the school administrators with a methodological means of proposing certain development skills to focus on. In cases where administrators were digitally smart, they led the teachers through the adoption process with the drivers of trialability, compatibility, and relative advantage, factors that increased teacher confidence and work satisfaction.

However, the theory has limitations; the theory lays much stress on the responsibility of an individual, teachers, and administrators instead of focusing on barriers. Critics also argue that the diffusion of innovation lacks organizational context, making the adoption stages too simple.

### **Review of Related Literature**

Alenezi's (2024) research in Saudi Arabia has determined that digital skills for school administrators foster professional development and job commitment among teachers. The prior research paper investigates the necessity of teachers to have a combination of pedagogical knowledge, technology, and soft skills, including communications and critical thinking. Besides, the research on digital skills of the administrators conducted by Adu and Zondo (2024) in South Africa shows that administrators with digital literacy can promote professional development and job dedication among teachers. Nevertheless, an earlier analysis looks into the continuing support and resources, which indeed matter to educators in continuing their digital skill acquisition. Further, the research conducted by Mbune et al. (2024) in Kenya has shown that administrators possessing digital literacy have the potential to contribute greatly to the incorporation of information communication technology among the educators, thereby augmenting the professional development, and the administrators tend to be more loyal to their careers. Furthermore, there are contextual and focus gaps in the previous study since this earlier study focuses on the individual consideration practice of principals about teachers using information communication technology in the study of the public secondary schools in Kenya, whereas this current study focuses on the digital competence practice of school administrators about the job commitment practice of teachers of the governmental secondary schools in Tanzania. According to another research by Lubuva et al. (2024) carried out in Tanzania, even some of the teachers have had their morale for their commitment to the job boosted by their digital competence as administrators. The reflection of the prior study indicates that the involvement of tutors in the information and communication technology can boost their confidence in efficiently using the ICT tools when teaching. The gap in the previous study in context is that the previous study designs ICT-integrated lesson activities, which is an

intervention to enhance the pedagogical use of ICT competences by the tutors in Tanzanian teacher education, whereas the current study examines how the digitally competent school administrators affect the commitment of teachers to their jobs in the secondary schools in Morogoro Municipality, Tanzania.

## **Methodology**

The study adopted a pragmatic and convergent design under a mixed research approach. Pragmatism philosophy were employed, the target population involved in the study was 140 participants include School administrators and selected public secondary school teachers in Morogoro Municipality. The sample size of the study was 10 School administrators and 130 Teachers. Whereby, purposive sampling technique and stratified sampling techniques were used to get the representatives. Questionnaires, interview guide and structured questionnaire were employed to get the data. Research experts validated the instruments. The data were analysed quantitatively using descriptive statistics and thematic analysis for qualitative data. Before actual data analysis, a pilot study was conducted to establish data reliability. A Cronbach Alpha of 0.941 for quantitative data was found while, for qualitative data, triangulation was used. Ethical considerations were precisely followed, ensuring informed consent, confidentiality, and before going to the field for data collection, obtained an introductory letter from the university and obtained permission letters from RAS at Morogoro region, which was directed to district administrative secretaries, who then wrote an introduction letter to the selected public secondary schools administrators.

## **Findings and Discussion**

The study sought to examine on how school administrators digital competences influencing teachers job commitment in Morogoro Municipality, Tanzania. The research question has been

answered by 140 participants comprising 0f 10 school administrators by using interview guide and 130 teachers using structured questionnaires. Their responses were analysed using descriptive statistics for quantitative data while thematic analysis was applied to qualitative data.

The data are summarized and presented in Tables 1.

**Table 1 Teachers Reponses on the Extent to which School Administrators' Digital Competencies Influence Teachers' Job Commitment (n = 130)**

SN	STATEMENT	SD (F)%	D (F)%	N (F)%	A (F)%	SA (F) %	MEAN	S.DVN
1	My school administrators' proficiency with technology makes me feel more valued as a teacher.	(1)0.8	(7)5.4	(25)19.2	(68)52.3	(29)22.3	3.90	0.834
2	When a school administrator Using data from digital sources to make decisions strengthens my commitment to the school's goals.	(1)0.8	(5)3.8	(22)19.6	(70)53.8	(32)24.6	3.98	0.802
3	Observing my school administrators embrace technology motivates me to integrate digital tools in my teaching practices.	(1)0.8	(5)3.8	(24)18.5	(62)47.7	(38)29.2	4.01	0.840
4	When my school administrators effectively use digital tools for communication, it increases my sense of motivation.	(1)0.8	(2)1.5	(19)14.6	(65)50.0	(43)33.1	4.13	0.771
5	When my school administrators provide digital resources and opportunities related to technology, it strengthens my commitment to the school.	(2)1.5	(1)0.8	(16)12.3	(71)54.6	(40)30.8	4.12	0.768
6	My school administrators' proficiency with technology makes me feel more supported	(1)0.8	(4)3.1	(14)10.8	(67)51.5	(44)33.8	4.15	0.789
7	Teachers' morale is busted when school administrators use digital tools to recognize teachers' achievements.	(4)3.1	(2)1.5	(20)15.4	(65)50.0	(39)30.0	4.02	0.893
8	Seeing my school administrators using technology motivates me to explore digital tools in my teaching activities	(2)1.5	(1)0.8	(9)6.9	(73)56.2	(45)34.6	4.22	0.736
9	If my school administrator is digitally competent, I feel more empowered to innovate in my teaching.	(1)0.8	(3)2.3	(13)10.0	(66)50.8	(47)36.2	4.19	0.769
10	School administrators who use data from digital sources to make informed decisions increase teachers' trust in their leadership.	(3)2.3	(3)2.3	(11)8.5	(70)53.8	(43)33.1	4.13	0.839

**Key: 1= Strongly Disagree (SD), 2= Disagree (D), 3= Neutral (N), 4= Agree (A), and 5= Strongly Agree (SA).**

**Source: Field study (2025)**

### **School administrators' technology skills make teachers feel valued.**

The results indicate that most of them, 52.3% said they agreed and 22.3% strongly agreed that the proficiency of my school administrators with technology makes me feel more appreciative as a teacher, with the average of the score being 3.90. This means that the teachers will be more relaxed and appreciated because they believe that their administrator is adept at technology, as most teachers have affirmed the conclusion. According to the study carried out by Balatero and Bauyot (2024), teachers perceive themselves to be appreciated when the school administrators are well versed with technology because it results to better assistance, effective communication, and other teaching aids that contributes to greater satisfaction in the teaching practice. It means that when school leaders become sincere about the professional development of the teachers, in terms of technology and wellbeing application, teachers are more likely to be motivated, dedicated, and happy when playing their roles. According to the Diffusion of Innovation Theory by Everett Rogers (1962), administrators' proficiency in digital tools enhances adoption, reduces resistance, and makes teachers feel respected and equipped in a changing educational landscape. This view is supported by Ertmer et al. (2012), who found that leaders' modelling of technology use encourages teachers' integration of digital tools, and by Balatero and Bauyot (2024), who emphasize that administrators' effective use of technology strengthens teachers' sense of value and motivation.

### **Commitment Strengthened by Administrators' Data-Driven Decisions**

In the question where the respondents were asked to agree and strongly agree that they have to rate the statement that the school administrators use data in digital sources to make decisions, the results show that 53.8% and 24.6% agreed and strongly agreed respectively, which enhances the

commitment of the teacher to the school goals. The vast majority of the respondents thought that when their school administrators rely on data provided on the basis of digital sources to take decisions, they reinforce the commitment of teachers to achieve the school goals. According to a study conducted by Dhiba et al. (2024), school administrators rely on digital sources and information system to make data-driven decisions that enhance the quality of school management in digital age. This means that the application of digital data would assist school administrators demonstrate evident improvement, transparency and common interest in improvement. Diffusion of Innovation Theory by (Everett Rogers) states that the apparent use of innovation by leaders acts as a driving force to others adopting the goals. This means that through the successful use of digital data by school administrators, it will bring a sense of trust and credibility, which enhances dedication to school objectives.

### **Teacher Motivation from Observing Administrators' Technology Use**

Based on the Table, 47.7% of the respondents respond to agree and 29.2% intensely agree that when they see my school administrators adopt technology, they are encouraged to use digital tools to practice teaching, with an average of 4.01. According to a study by Ertmer et al. (2012) the supporting factor cited as having a significant impact on the technology integration practice in teachers is the support of the administrators which in this case lends credence to the view that when the administrators accept the use of technology then this can inspire the same in teachers. One of the interviews was carried out with one of the school administrators F school is saying that we provide a conducive atmosphere that encourages the teachers to be more accommodating to technology such as digital tools and educational software such as projectors, internet access, and projectors. More so, we motivate teachers to embrace technology and assist teachers to

embrace technology. Other than that, we developed a culture of collaboration, through which teachers can exchange ideas, experiences and digital strategies.

### **Impact of Administrators' Digital Communication on Teacher Motivation**

The act has been proven by statistics, with half of the respondents reported to have been in total agreement with the statement and 33.1% strongly agreed with the statement that with effective use of digital tools by school administrators to communicate, it enhances the sense of motivation. Among the school administrators who took part in the interview, one of them who quoted, indicated that: "We use WhatsApp and email addresses as a digital tool to communicate with teachers (Interview April, 2025)". According to the research conducted by Mbune et al. (2024), the ability of school administrators to successfully utilize the digital communications tools will have a positive influence on teacher's motivation to implement the technology in their personal teaching. Nevertheless, this earlier research states that when administrators demonstrate effective utilization of ICT to communicate, they provide the encouraging environment that encourages the confidence of the teachers and their readiness to use digital tools.

### **Effect of Digital Resources on Teachers' Commitment**

Statistics show that 54.6% of teachers agreed and 30.8% strongly agreed that the provision of digital resources and opportunities by the school administrators pertaining to technology would promote teacher commitment to the school. This result indicates that accessibility to online facilities and possibilities is a significant driver of the interest of teachers in their practice. The findings related to those of Mbune et al. (2024) who highlight that when administrators invest in and model the application of digital communication and instructional tools to facilitate this, they

foster the readiness of teachers to adopt technology in their practice. Similarly, Gordashnikova et al. (2021) state that administrators who gain an access to pertinent ICT infrastructure (e.g., computers, stable internet, and learning platforms) create a facilitating environment in which teachers feel unprecedented and encouraged to provide quality teaching. These findings were also confirmed by interview data of this study. Some teachers indicated that the provision of laptops and projectors or e-learning access by their administrators made them consider creating more desirable lessons and stay committed to their schools. According to one of the teachers, the moment the school issued us with tablets, and offered us occasional training in using them, I felt important and desired to remain and use what I learned. The quantitative data, the qualitative interviews, and the previous literature demonstrate the same tendency: the use of digital resources by the administrators is not only a logistical service but also a demonstration of institutional value. Such support, according to Diffusion of Innovation Theory by (Rogers, 1962), is a form of relative advantage and will not only decrease impediments to adoption, but also raise the confidence of the teachers in their capability to innovate. When teachers feel that leadership is making the relevant resources investment, they tend to embrace technology usage, collaboration, and greater job commitment.

### **Support Perceived from Administrators' Technology Proficiency**

The results indicate that 51.5% and 33.8% of teachers agreed and strongly agreed that proficiency of the school administrators in technology provides the teachers with the feeling of support. This indicates that teachers are more inclined to embrace digital tools in cases where the leadership exhibits competence. The perception was supported by the data obtained during interviews. Teachers said that when the administrators could effectively utilize email, WhatsApp, or school management software, this indicated that they could be approached to advise. One of

the participants noted, that in cases when the head teacher is familiar with the platforms we work with, I am sure that I can request some assistance; it makes me less worried about the attempts to use new tools. These findings correspond to Gordashnikova et al. (2021) who believe that digitally capable principals foster an environment that helps to foster creativity and meaningful application of ICT. Similarly, Alenezi (2024) discovered that the proficiency of administrators in technology guarantees employees and encourages professional development. In theory, Leaders can be seen as knowledgeable change agents who reduce uncertainty and offer social reinforcement needed to adopt change through the Diffusion of Innovation Theory (1962) of Rogers. Relying on quantitative data, qualitative data, and previous findings, the evidence leads to an obvious conclusion: digital proficiency of administrators is not only a technical ability but also a source of psychological and instructional support. School leaders enable a conducive environment by modeling good ICT use and offering easy-to-access support which encourages teachers to adopt technology and commit themselves to their job.

### **Boost in Teacher Morale Through Digital Recognition**

The results in table 1 indicate that half of the teachers were in agreement and the other half strongly agreed that morale is increased when school administrators acknowledge the performance of the teachers with the help of digital tools. This indicates that the social recognition particularly technology is a significant factor in maintaining the passion and commitment. The qualitative data shows that teachers felt proud when their head teachers sent them congratulatory messages through WhatsApp or when they talked about their work in online staff meetings. One of the teachers remarked, "I feel significant and motivated to continue improving after the head makes our stories of success in the school group. Administrators also stated that they have deliberately used emails and digital noticeboards to present the innovations

of the teachers and the progress of the students. These findings are consistent with Balatero and Bauyot (2024), who concluded that digital platforms assist leaders to celebrate the achievement of the staff in real-time and boost their morale and motivation. In theory, the Diffusion of Innovation Theory (1962) by Rogers is based on the idea that the social reinforcement of early adopters leads to less uncertainty and more openness to experiment a new practice. A combination of the quantitative data (high rates of agreement), interview accounts (teachers appreciating the importance of online recognition) and the information presented in the previous literature shows no other pattern: when the administrators use digital tools to laud success, they help develop a culture of appreciation. This kind of atmosphere encourages teachers, increases their professionalism as well as encouraging them to be loyal to the teaching profession.

#### **Motivation to Explore Digital Tools from Administrators' Technology Use**

According to the data provided in Table 1, 56.2% and 34.6% of teachers agreed and strongly agreed respectively, that the use of technology by school administrators encourages teachers to integrate digital technologies in their respective teaching processes. This implies that the evident use of the ICT by the leaders is a powerful motivation to the willingness of teachers to innovate. These figures were backed by interview evidence. Some of the teachers stated that seeing their heads create lessons using PowerPoint, organize the records using Google spreadsheets, or organize the communication between staff using WhatsApp made them want to learn and use this tool. According to one teacher, I feel challenged when I see my headmaster making presentations, or using resources online, because I am motivated to enhance my digital skills. This result correlates with that of Mbune et al. (2024) that believe that administrators who actively model successful ICT practices establish an environment that cultivates teacher confidence and motivation. Similarly, Ertmer et al. (2012) observe that the integration of

technology by teachers is enhanced when the leaders demonstrate and illustrate its practical application. Theoretically, the Diffusion of Innovation Theory by Rogers (1962) explains that agents of change who are visible in the use of an innovation will become role models and decrease uncertainty and legitimization of new practices. Based on the quantitative findings and the qualitative data, the same picture is observed: the use of digital tools by administrators can send a strong signal that technology is appreciated and worth using. The effect of this modeling enhances motivation of teachers to explore ICT, which helps in profession development and commitment in long term work.

### **Empowerment for Innovation via Administrators' Digital Competence**

The findings show that, 50.8% of the teachers responded that they strongly agreed to the statement and 36.2%t agreed to the statement that, teachers feel more empowered to be innovative in their teaching whereby the school administrators are digitally competent. This observation demonstrates that the proficiency of administrators in technology does not only enhance the efficiency in management, but also helps build the confidence of educators to explore new teaching strategies. This outcome is supported by responses from interviews. One of the administrators stated that he or she is well skilled in using Microsoft word, Excel, PowerPoint, as well as using the internet and that this will enable him or her to instruct teachers and suggest appropriate tools. Echoed by teachers, the presence of a leader who could mentor them in matters that pertain to ICT, instilled a feeling of security and support to take a risk and implement new strategies like online assessment, blended learning, and multimedia lesson design. These findings are similar to Gordashnikova et al. (2021), who discovered that digitally proficient principals develop creativity and meaningful use of ICT among the staff, and Alenezi (2024), who argues that supportive leaders develop the ability of teachers to use technology

meaningfully in the classroom. Competent change agents also help to diminish the uncertainty adopted (Diffusion of Innovation Theory, 1962) as innovation will seem feasible and beneficial. Based on the quantitative results, qualitative descriptions, and the previous studies, the evidence proves that the digital competence of administrators helps teachers to plan and introduce new teaching concepts. School leaders facilitate the environment of valuing innovation by modeling skills and offering technical advice, and in the outcome, increasing the commitment of teachers to their job.

### **Trust in Leadership from Administrators' Data-Driven Decisions**

According to statistics, 53.8% of teachers agreed and 33.1% strongly agreed that administrators who make informed decisions with the help of data obtained through the digital sources enhance the trust of teachers in their leadership. This is what evidences the role of evidence based management in enhancing professional relationship in schools. This is supported by interview evidence. According to teachers who went on to assert that when heads used student performance dashboards, attendance software or electronic reports to justify changes in the teaching schedules or the allocation of resources, staff members felt that the decisions were transparent and based on factual argumentation and not personal preference. A teacher commented, "When our head builds up policies on transparent information, it demonstrates impartiality and causes us to have confidence in the procedure. This is evidenced by Dhiba et al. (2024), who state that data-driven leadership increases accountability and ensures better management of schools in the digital age. Similarly, Ertmer et al. (2012) note that the credibility among staff is established during the use of information systems in guiding the professional practice. On the theoretical level, the Diffusion of Innovation Theory by Rogers (1962) states that the leaders should demonstrate the practical value of the new practices like data-based

planning to diminish the uncertainty and encourage the adoption of the strategies of improvement. Based on the quantitative data (high levels of agreement), qualitative evidence (valuing the transparent decision-making by the teachers), and previous studies, one can state that administrators who use digital data to make decisions build trust and legitimacy. The trust, in its turn, reinforces the motivation of the teacher, leads to more collaboration and commitment to staying in the school.

### **Conclusions of the Study**

From the findings, it is concluded that school administrators' digital competence contributed to the teacher's job commitment, as administrators gave collaboration, supportive, innovative environments to teachers, promoting professional development and teamwork. This leads to greater teacher engagement with their work. Also, digital competence positively influenced teachers' job commitment by providing strong digital leadership, fostering a supportive environment for technology use, and enhancing teachers' digital skills and confidence. This leads to greater teacher engagement with their work.

### **Recommendations of the Study**

Recommendations to the Ministry of Education, Science, and Technology Level

The policy makers working in the Ministry of Education Science and Technology provide attention to the development of the digital competence of school administrators and teachers using the continuous professional development and training programme, which involves among others, the establishment of clear national standards and frameworks related to digital competence according to the international best practices to inform the administrators and teachers on the effective integration of digital technologies in teaching and school management, in general. Besides, Provision of ongoing in-service training and materials to develop digital

skills so that administrators can spearhead digital change and assist teachers on embracing digital tools. Moreover, equal access to digital devices and infrastructure in schools should be provided by the Ministry of Education, Science and Technology to make it possible to put into practice digital skills. Finally, the ministry of Education, Science and Technology is supposed to encourage inclusive use of technology in teaching and responsible technology use in order to increase job commitment by teachers.

### **Recommendations to the Public Secondary School Level**

To become the head of technology integration and provide efficient teacher support, school administrators are expected to build effective digital skills. Moreover, school administrators can provide professional development of the teachers periodically to make them more digitally competent and confident in their use of technology, to develop the culture where teachers can exchange digital practices, innovations, help each other develop further. In addition, the administrators need to encourage the use of digital tools in lesson planning, delivery, and assessment to enhance the learning outcomes. The administrators of schools ought to motivate the teachers to experiment with the new digital approaches without the fear of failure, which will help them to be more creative and committed. In addition, they are expected to offer sufficient digital infrastructure, equipments, and technical services to enable easy use of technology. Besides, administrators are encouraged to celebrate the achievements and the efforts of teachers to embrace digital tools to increase their motivation and commitment to the job.

### **Recommendation for Further Studies**

The study recommends that interested educational researchers investigate the influence of school administrators' digital competence on teachers' job commitment at another level of education in different districts and regions. Also, the study recommends more research to be conducted on

how school administrators' specific digital skills affect teachers' job commitment across different educational settings to identify effective digital leadership practices, and to develop targeted strategies and training programme that enhance teacher motivation, performance, and maintenance and also analyze the relationship between digital competence, leadership styles, and teachers' innovation to identify best practices.

#### COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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