

Digital Leadership Relationships Among School Administrators with the Effectiveness of Academic Work in the New Normal Era

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Received: March 2, 2024

Accepted: June 13, 2024

Online Published: June 19, 2024

doi:10.5539/hes.v14n3p38

URL: <https://doi.org/10.5539/hes.v14n3p38>

Abstract

This research article aims to 1) study the digital leadership of educational institution administrators under the Sukhothai Primary Educational Service Area Office, Area 2, Thailand 2) study the effectiveness of academic work in the new normal era of administrators under the Sukhothai Educational Service Area Office, Area 2, Thailand. Sukhothai Primary Educational Service Area Office 2, Thailand and 3) study the relationship between digital leadership of school administrators and academic work effectiveness in the new normal era under the Sukhothai Primary Educational Service Area Office 2, Thailand. This is quantitative research. The sample group is educational institution administrators. and academic teachers of affiliated educational institutions Sukhothai Primary Educational Service Area Office 2, 230 people. The research tool is a questionnaire on digital leadership of school administrators and academic effectiveness in the new normal era. It is a 5-level rating scale questionnaire. Data is analysed using basic statistics to find the average. and standard deviation and the relationship was analysed using the Pearson correlation coefficient. The results of the research found that 1) the digital leadership of educational institution administrators under the Sukhothai Primary Educational Service Area Office, Area 2, Thailand is overall at a high level; 2) academic work effectiveness in the new normal era of administrators under the district office Sukhothai Primary Educational Service Area Office 2, Thailand, overall is at the highest level, and 3) the relationship between digital leadership of school administrators and academic work effectiveness in the new normal era under the Office of Sukhothai Primary Educational Service Area 2, Thailand, was found. that there is a statistically significant relationship at the .01 level

Keywords: digital leadership, executives, academic effectiveness

1. Introduction

Constitution of the Kingdom of Thailand Establish a 20-year national strategy (2018-2037) as a goal for sustainable national development. In line with national policies and plans regarding digital development for society and society (2018-2037), which is the main master plan for developing the country's digital economy and society for a period of 20 years that sets the direction for driving by using digital technology. The overall goal is to increase the country's economic competitiveness. By using innovation and digital technology To prepare all groups of personnel to have knowledge and skills suitable for living and working in the digital age Paradigm reform Working and providing government services with digital technology Make operations transparent Efficient and effective (Office of the National Digital Economy and Society Commission, 2018), which factors influence driving change As mentioned above, within an organization one important factor is Leadership of educational institution administrators.

Academic administration is an important mission of school administration as defined by the National Education Act of 1999 and its amendments (No. 2) of 2002. It is considered the most important task. It is the heart of educational management. including school administrators, teachers, and all stakeholders Must have knowledge and understanding Give importance and participate in planning Establish evaluation practices and systematic and continuous improvement Aiming to decentralize management to as many educational institutions as possible. This will be an important factor in making the educational institution stronger in administration and management. Able to develop curriculum and learning processes as well as measurement, evaluation, and supporting factors. Developing the quality of students, schools, communities, and local areas with quality and efficiency. From studying documents and research, it was found that some educational institution administrators still may not give

importance to academics and organization. Learning as you should Lack of communication to personnel in their educational institutions to be aware of the goals and strategic plans for academic management that cover the academic framework, resulting in student academic achievement. The goal has not been achieved. Assistance to the student care system has not yet been able to adapt to the changing trends in society in the digital age. Educational management cooperation There is still little participation between the school and the community. The learning management process still places the teacher at the center. Lack of innovative media and modern technology Lack of research to develop student quality (Makate, Sompongtham, & Kewara, (2021).

Educational institution administrators as academic leaders Therefore, it is necessary to change one's own management behavior to be suitable for being an administrator in the era of educational reform in the digital age and should create transformational leadership for oneself. Have a broad vision Have courage to think, dare to act, have good human relations. To push for change within educational institutions Therefore, the digital leadership of school administrators is an important factor affecting the success or failure of an organization. or educational institution If school administrators have high digital leadership, they will have a competitive advantage, which will lead to sustainable achievement of goals (Saensuk, 2016).

Digital leadership It is a leader's behavior that shows knowledge. Understanding of the use of digital technology in organizational management Has a vision and is a leader in promoting and supporting personnel to use technology. Come integrate communication innovation and working within the organization efficiently Because learning management and education management in the digital age Focus on developing students to have a variety of knowledge and skills. Students must be eager to learn. to create knowledge for oneself Practice developing and extending knowledge to create new works, products, or innovations. It is technologically sensitive and can be applied to generate income. in living or learning effectively (Thawinkarn, 2021) Educational institution administrators therefore play an important role in developing education, driving the development of learning, and leading the organization toward success. Succeeded in the context of changes in digital technology. Therefore, educational institution administrators in the digital age must keep up with changes in technology. Because of the executives, it is key to both practical and cultural change within schools. Focus on using digital technology in management to raise the quality of students and personnel to keep up with changes and achieve organizational goals (Sheninger, 2019).

Therefore, the researcher is interested in studying the digital leadership of school administrators and academic effectiveness in the new normal era. Under the jurisdiction of the Sukhothai Primary Educational Service Area Office, Area 2, in order to be able to apply the information in management and be beneficial to the development of educational institutions to be more effective.

2. Method

Step 1 The research model

This research is quantitative research by collecting and analysing data obtained from document analysis. and interview form and analyse data obtained from the assessment form Present the study results in a descriptive analysis using quantitative and qualitative data, data synthesis and description.

Step 2 Populations and samples

The population used in the study consisted of 2 main target groups: 1) school administrators under the Sukhothai Primary Educational Service Area Office 2 2) academic teachers under the Sukhothai Primary Educational Service Area Office 2, which the researcher conducted the sample was selected to facilitate data collection and to obtain information from the sample. The research sample included a total of 230 people, consisting of

1) 115 school administrators under the Sukhothai Primary Educational Service Area Office 2 using the purposive sampling method.

2) academic teachers under the area office. Sukhothai Primary Education Area 2, 115 students, using the Purposive Sampling method.

Step 3 Tools used in research

The tools used to collect data consisted of

1) document analysis form

2) unstructured interview form on digital leadership of school administrators and academic work effectiveness in the new normal era.

Step 4 Data collection

1) Study of regional data. Document (Documentary Study) by gathering information from documents, books, journals, both theoretical Related concepts and research in order to use the obtained data to analyse the study issues.

2) Situational Analysis is the collection of qualitative data. By synthesizing relevant documents and research. Interview with educational institution administrators and academic teachers the tools used are Unstructured interview on digital leadership of school administrators and academic effectiveness in the new normal era

Step 5 Data analysis

Data is analysed using basic statistics to find the average. and standard deviation and the relationship was analysed using the Pearson correlation coefficient.

3. Results

For the research at this time, the research team has classified the data obtained from the study and presented the research results according to the determined objectives. The study results can be summarized as follows:

1. Digital leadership of educational institution administrators Under the Sukhothai Primary Educational Service Area Office, Area 2, the overall picture is at a high level. digital communication has the highest average as for having a digital vision has the lowest average as shown in Table 1

Table 1. Results of the study of digital leadership of school administrators

No	List	n = 230		level	number
		\bar{x}	S.D.		
1	Digital literacy	4.49	0.47	a lot	2
2	digital communication	4.51	0.47	the most	1
3	In terms of having a digital vision	4.33	0.36	a lot	5
4	Creating a digital culture	4.44	0.48	a lot	3
5	Digital organization development	4.38	0.56	a lot	4
Including		4.43	0.41	a lot	

The results from Table 1 when considering each aspect appear as follows.

From Table 1 Digital leadership of school administrators Under the jurisdiction of the Sukhothai Primary Educational Service Area Office, Area 2, the overall level was at a high level, with an average (\bar{x} = 4.43). When considering each aspect, it was found that the side with the highest average is Digital communication (\bar{x} = 4.51), followed by digital literacy (\bar{x} = 4.49), with the lowest average being in terms of having a digital vision (\bar{x} = 4.33)

2. Academic work effectiveness in the new normal era Under the Sukhothai Primary Educational Service Area Office, Area 2, the overall picture is at the highest level. Internal quality assurance and educational standards has the highest average educational supervision section has the lowest average as shown in Table 2

Table 2. Results of the study of academic work effectiveness in the new normal era Under the jurisdiction of Sukhothai Primary Educational Service Area Office 2

No	List	n = 230		level	number
		\bar{x}	S.D.		
1	Educational institution curriculum development	4.55	0.45	the most	3
2	Development of the learning process	4.53	0.42	the most	4
3	Measurement and evaluation	4.61	0.47	the most	2
4	Developing and using media and technology for education	4.46	0.45	a lot	5
5	Research to improve the quality of education in educational institutions	4.44	0.43	a lot	6
6	educational supervision	4.40	0.48	a lot	7
7	Internal quality assurance and educational standards	4.64	0.45	the most	1
Including		4.52	0.39	the most	

From Table 2 Academic work effectiveness in the new normal era Under the jurisdiction of the Sukhothai Primary Educational Service Area Office, Area 2, the overall level was at the highest level, with an average (\bar{x} = 4.52). When considering each aspect, it was found that the side with the highest average is Internal quality assurance and educational standards (\bar{x} = 4.64), followed by measurement and evaluation (\bar{x} = 4.61), with the

lowest average being educational supervision (\bar{x} = 4.40)

3. The relationship between digital leadership of school administrators and academic effectiveness in the new normal era Under the jurisdiction of the Sukhothai Primary Educational Service Area Office, Area 2, the overall picture is at a moderate level, as shown in Table 3.

Table 3. Results of the study of the relationship between digital leadership of school administrators and effectiveness Academic work in the new normal era, overview

No	List	Academic work effectiveness in the new normal era							
		Curriculum	learning process	Evaluation measure	Develop and use media	search	Supervision	Quality Assurance	together
1	Digital literacy	.657**	.821**	.592**	.655**	.628**	.556**	.556**	.732**
2	Digital communication	.547**	.701**	.452**	.556**	.562**	.506**	.465**	.621**
3	Digital Vision	.485**	.646**	.485**	.596**	.625**	.514**	.498**	.631**
4	Creating a digital culture	.547**	.694**	.572**	.617**	.532**	.534**	.540**	.663**
5	Digital organization development	.696**	.909**	.657**	.794**	.721**	.639**	.634**	.828**
Including		.678**	.871**	.637**	.742**	.702**	.632**	.620**	.801**

** p < .01, statistically significant at the .01 level.

* p < .05, statistically significant at the .05 level.

From Table 3 The relationship between digital leadership of school administrators and academic effectiveness in the new normal era, there is a positive relationship with the development of school curriculum. Measurement and evaluation, development, use of media and technology for education Research to develop the quality of education in educational institutions educational supervision and internal quality assurance and educational standards at a moderate level and has a positive relationship with the development of the learning process at a high level, respectively, with statistical significance at the .01 level.

Table 4. Results of analysis of the relationship between digital leadership of school administrators and effectiveness Academic work in the new normal era educational institution curriculum development

digital leadership	Effectiveness in educational institution curriculum development		
	r	P-value	Relationship level
1. Digital literacy	.657**	0.000	moderate
2. Digital communication	.547**	0.000	moderate
3. Digital Vision	.485**	0.000	moderate
4. Creating a digital culture	.547**	0.000	moderate
5. Digital organization development	.696**	0.000	moderate
Including	.678**	0.000	moderate

** p < .01, statistically significant at the .01 level.

* p < .05, statistically significant at the .05 level

From Table 4, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. Educational institution curriculum development in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, it is at a moderate level (r = .696) with statistical significance at the .01 level.

Table 5. Results of the analysis of the relationship between digital leadership of school administrators and academic effectiveness in the new normal era. Development of the learning process

digital leadership	Effectiveness in developing the learning process		
	r	P-value	Relationship level
1. Digital literacy	.821**	0.000	high
2. Digital communication	.701**	0.000	moderate
3. Digital Vision	.646**	0.000	moderate
4. Creating a digital culture	.694**	0.000	moderate
5. Digital organization development	.909**	0.000	high
Including	.871**	0.000	high

** p < .01, statistically significant at the .01 level.

* p < .05, statistically significant at the .05 level.

From Table 5, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. Development of the learning process in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, the level is high (r = .909) with statistical significance at the .01 level.

Table 6. Results of the analysis of the relationship between digital leadership of school administrators and academic effectiveness in the new normal era. Measurement and evaluation

digital leadership	Effectiveness in measurement and evaluation		
	r	P-value	Relationship level
1. Digital literacy	.592**	0.000	moderate
2. Digital communication	.452**	0.000	moderate
3. Digital Vision	.485**	0.000	moderate
4. Creating a digital culture	.572**	0.000	moderate
5. Digital organization development	.657**	0.000	moderate
Including	.637**	0.000	moderate

** p < .01, statistically significant at the .01 level.

* p < .05, statistically significant at the .05 level.

From Table 6, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. Measurement and evaluation in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, it is at a moderate level (r = .657) with statistical significance at the .01 level.

Table 7. Results of the analysis of the relationship between digital leadership of school administrators and academic effectiveness in the new normal era. Development of media and technology for education

digital leadership	Effectiveness in developing the use of media and technology for education		
	r	P-value	Relationship level
1. Digital literacy	.655**	0.000	moderate
2. Digital communication	.556**	0.000	moderate
3. Digital Vision	.596**	0.000	moderate
4. Creating a digital culture	.617**	0.000	moderate
5. Digital organization development	.794**	0.000	moderate
Including	.742**	0.000	moderate

** p < .01, statistically significant at the .01 level.

* p < .05, statistically significant at the .05 level.

From Table 7, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. Development of

media and technology for education in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, it is at the moderate level ($r = .794$) with statistical significance at the .01 level.

Table 8. Results of the analysis of the relationship between digital leadership of school administrators and academic effectiveness in the new normal era. Research to develop the quality of education in educational institutions

digital leadership	Research effectiveness to develop the quality of education in educational institutions		
	r	P-value	Relationship level
1. Digital literacy	.628**	0.000	moderate
2. Digital communication	.562**	0.000	moderate
3. Digital Vision	.625**	0.000	moderate
4. Creating a digital culture	.532**	0.000	moderate
5. Digital organization development	.721**	0.000	moderate
Including	.702**	0.000	moderate

** $p < .01$, statistically significant at the .01 level.

* $p < .05$, statistically significant at the .05 level.

From Table 8, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. In terms of research to develop the quality of education in educational institutions in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, it is at the moderate level ($r = .721$) with statistical significance at the .01 level.

Table 9. Results of the analysis of the relationship between digital leadership of school administrators and academic effectiveness in the new normal era. Educational supervision

digital leadership	Effectiveness in educational supervision		
	r	P-value	Relationship level
1. Digital literacy	.556**	0.000	moderate
2. Digital communication	.506**	0.000	moderate
3. Digital Vision	.514**	0.000	moderate
4. Creating a digital culture	.534**	0.000	moderate
5. Digital organization development	.639**	0.000	moderate
Including	.632**	0.000	moderate

** $p < .01$, statistically significant at the .01 level.

* $p < .05$, statistically significant at the .05 level.

From Table 9, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. Educational supervision in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, the level was significantly high ($r = .639$). Statistically at the .01 level.

Table 10. Results of the analysis of the relationship between digital leadership of school administrators and academic effectiveness in the new normal era. Internal quality assurance and educational standards

digital leadership	Effectiveness in internal quality assurance and educational standards		
	r	P-value	Relationship level
1. Digital literacy	.556**	0.000	moderate
2. Digital communication	.465**	0.000	moderate
3. Digital Vision	.498**	0.000	moderate
4. Creating a digital culture	.540**	0.000	moderate
5. Digital organization development	.634**	0.000	moderate
Including	.620**	0.000	moderate

** $p < .01$, statistically significant at the .01 level.

* $p < .05$, statistically significant at the .05 level.

From Table 10, it is found that the digital leadership of school administrators in digital organizational development There is a positive relationship with academic productivity in the new normal era. Internal quality assurance and educational standards in educational institutions under the Sukhothai Primary Educational Service Area Office, Area 2, it is at a moderate level ($r = .634$) with statistical significance at the .01 level.

4. Discussion

1. Digital leadership of educational institution administrators Under the Sukhothai Primary Educational Service Area Office, Area 2, the overall picture is at a high level. The side with the highest average is digital communication This may be because executives can use digital technology in communication. public relations Create mutual understanding between students, parents, and communities. News is publicized through various channels, which is consistent with research by Chuewangkam & Areerat. (2021) studied the elements of digital leadership of administrators. educational institution Under the jurisdiction of the Udom Thani Primary Educational Service Area Office, Area 4, the research results found that Digital leadership of school administrators under the Udom Thani Primary Educational Service Area Office, Area 4 has 3 main components: 1) digital citizenship Consists of 3 indicators: knowing and using digital communication and ethics in digital use and by Komonwanich (2020) has conducted research on Digital leadership of school administrators that affects teacher competency in the 21st century under the office Secondary Educational Service Area 23, overall, has a high level of practice in every aspect. When considered in order, it is found that the digital communication aspect has the highest practice. Followed by having a digital vision and digital literacy. The aspect with the lowest average is having a digital vision. This may be due to the ability to use digital technology to drive the organization's operations. Using it to analyse the context and environment of the educational institution to formulate a digital vision that focuses on using technology to create and develop innovation to drive internal operations to the highest efficiency in the context of the institution. The study This is consistent with Komonwanich (2020) who gave her view on having a digital vision that in the dimension of having a digital vision, it can be shown leaders or executives must have the ability to express a wide range of opinions about your vision in the digital age. Must have a progressive and modern mindset. Have the courage to make decisions and when there is change, executives must be able to set the organization's vision in the digital age to keep up with the times. changes in technology consistent with Suwannarat (2021), who studied the digital leadership of educational institution administrators. Under the jurisdiction of the Nonthaburi Secondary Educational Service Area Office, the aspect with the lowest average was vision and skills in using digital technology.

2. Academic work effectiveness in the new normal era Under the jurisdiction of the Sukhothai Primary Educational Service Area Office, Area 2, the overall picture was at the highest level. It was found that the areas with the highest averages were internal quality assurance and educational standards. This may be because the educational institution has established guidelines for coordinating with the educational area for a clear assessment of the educational quality of the educational institution. As a result, educational quality assurance is achieved. To guarantee satisfaction and confidence for service recipients, parents, communities, and society towards educational institutions. This is in line with the European Commission (1975) which stated that educational quality assurance is a systematic educational process. Maintain the quality of education to be effective the aim is for the best effectiveness for learners. It also corresponds to Tangkunan (2020) stated that educational quality assurance is the systematic implementation of activities according to the mission of educational institutions. Considering standards, monitoring, evaluation, and continuous improvement to create confidence for service recipients. This is in line with the research of Lahanphet (2019) who studied the effectiveness of academic administration in small educational institutions based on teachers' opinions. Under the Surattani Primary Educational Service Area Office, Area 2, the research results found that Overall and, in each area, the average effectiveness of academic administration is at a high level. The aspect with the lowest average was educational supervision. This may be because the executives cannot promote continuous supervision. Planning and implementing the supervision system within the educational institution. Using the evaluation results Supervision comes to check for defects. Analyse problems and obstacles for improvement. Consistent with the Office of Basic Education Policy and Planning (2013), the principles of educational supervision are a collaborative process that uses reason. Supervision is the development and improvement of individual work methods to have quality supervision as part of the management process. For everyone to have confidence that they have acted correctly and have maximum benefit to the students and teachers themselves, organize supervision within the educational institution to be of thorough and continuous quality. This is consistent with Petklang (2018) who studied factors affecting the effectiveness of academic administration of schools in expanding educational opportunities. Chaiyaphum Primary Educational Service Area Office, Area 3 Overall academic administration effectiveness level is at a high level. When considering each aspect, it was found that it

was at a high level in every aspect. The aspect with the highest average was curriculum development in educational institutions. The aspect with the lowest average was educational supervision.

3. Relationship between digital leadership of school administrators and academic effectiveness in the new normal era, it was found that there was a relationship. It is statistically significant at the .01 level. This may be because school administrators demonstrate behaviors that have leadership in the digital age in stimulating change to occur in educational institutions, which will result in improved academic productivity in the new normal era. This is consistent with Buntham (2016), who studied leadership in the digital economy era, who said that learning management will make students become quality citizens in the digital era. Educational leaders need to know and understand well the context of educational institutions in the 21st century, including how to use innovative technology for education to lead to significant improvements resulting from the adoption of technology. Towards effective learning management in educational institutions in the 21st Century With the leadership in digital age of educational leaders This is in line with Thawinkarn (2021) who stated that digital leadership is important to the management of educational institutions in the digital era because it is a process or behavior of administrators who are aware of knowledge (Understand) and evaluate (Evaluate). Managing (Manage) and using (Use) information critically Can evaluate and use digital technology appropriately. Executives must develop digital leadership to keep pace with the advancement of digital change.

5. Conclusion

A study of digital leadership of school administrators and academic effectiveness in the new normal era. Under the jurisdiction of the Sukhothai Primary Educational Service Area Office, Area 2, this is a study to apply information on digital leadership of school administrators and academic work effectiveness in educational administration and is beneficial to the development of educational institutions to be effective. Even better results

6. Suggestions from the Research

6.1 Suggestions for Implementing Research Results

1. Educational institution administrators should incorporate digital technology into setting the vision of the organization that focuses on using technology to create and develop innovations. Drive organizational operations to be efficient.

6.2 Suggestions for Next Research

1 There should be a study of the causal factors that affect the digital leadership of educational institution administrators. to obtain information to suggest guidelines Policy or curriculum for the area office or those involved to develop the digital leadership of school administrators in driving operations to be more efficient.

Acknowledgments

Not applicable

Authors contributions

Nantawat Khemtong was drafted the manuscript.

Kittiyaporn Promchom was responsible for data collection.

Phetcharat Thumsen is the corresponding author of the article and was responsible for data collection.

Nirada Wechayaluck was drafted the manuscript.

Funding

Not applicable

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have

appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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