

Development of Leadership Indicators and Approaches for the District Directors of Non-formal and Informal Education in the Digital Era

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Abstract

The development of leadership indicators and approaches for district directors of non-formal and informal education in the digital era is crucial for adapting to technological advancements, enhancing leadership effectiveness, fostering creativity and innovation, promoting digital citizenship, and supporting ongoing professional development. These efforts ultimately contribute to the improvement of educational practices and outcomes in the digital age. The objectives of this research were as follows: To study the components and indicators of leadership among district directors of non-formal and informal education in the digital era. To examine the consistency of the developed leadership indicator structure model for district directors of non-formal and informal education in the digital era using empirical data. To develop a leadership development approach for district directors of non-formal and informal education in the digital era. To study the results of implementing the leadership development approach for district directors of non-formal and informal education in the digital era. The research was conducted in four phases, and statistical analysis included percentage, mean, standard deviation, and Confirmatory Factor Analysis. The results revealed the following: Leadership among district directors of non-formal and informal education in the digital era consisted of five components and fifteen indicators. The leadership development approach for district directors of non-formal and informal education in the digital era included the following components: creativity, participation, digital citizenship, digital vision, and digital professionalism. These components were prioritized based on the findings. The assessment of satisfaction with the leadership development approach for directors of district centers for non-formal and informal education in the digital era indicated a high level of overall satisfaction. These innovative approaches function as catalysts, not only propelling district directors to excel in their roles but also empowering them to champion innovation within the education domain. Most importantly, they play a pivotal role in driving substantial progress in the field of education as our world becomes increasingly digital.

Keywords: leadership indicators, development approaches, digital era

1. Introduction

The development of leadership indicators and approaches for district directors of non-formal and informal education in the digital era is of significant importance. Here are some key reasons why: Adapting to the digital era: The digital era has brought about rapid technological advancements and changes in the education landscape. District directors of non-formal and informal education play a crucial role in navigating these changes and ensuring effective educational practices. Developing leadership indicators and approaches specific to the digital era helps directors understand and address the unique challenges and opportunities presented by technology. Enhancing leadership effectiveness: Effective leadership is vital for the success of any educational institution. By developing indicators that reflect the key components of leadership in the digital era, district directors can enhance their effectiveness in leading their teams and institutions. These indicators provide guidance and direction, enabling directors to make informed decisions and take appropriate actions to promote innovation and positive change. Fostering creativity and innovation: The digital era demands leaders who can foster creativity and innovation in educational settings. By incorporating indicators related to creativity, such as encouraging independent thinking and generating innovations, district directors can create a culture of innovation within their organizations. This can lead to the development and implementation of innovative teaching methods, digital resources, and educational technologies. Promoting digital citizenship: With the increasing use of technology in education, it is essential for district directors to promote digital

citizenship among students, teachers, and staff. Including indicators related to digital ethics, literacy, and communication helps directors ensure responsible and ethical use of digital tools and platforms. This, in turn, helps create a safe and inclusive digital learning environment. Supporting professional development: Leadership indicators and approaches provide a framework for ongoing professional development for district directors. They serve as a guide for self-assessment and reflection, enabling directors to identify areas for improvement and prioritize their professional growth in the context of the digital era. Education occupies a pivotal role in human development, social advancement, and national progress. In the swiftly evolving 21st-century global landscape, education is indispensable for attaining a competitive edge and asserting a prominent position on the world stage. Acknowledging this, nations across the globe, including Thailand, have placed substantial emphasis on enhancing education and nurturing their human resources to keep pace with economic and societal transformations (Office of the Education Council, 2017). The digital era, characterized by breakneck technological advancements, has cast a significant impact on every nation, including Thailand. Hence, it becomes imperative to embrace and adapt to these changes (Anuchit Chomsri, 2019).

In Thailand, the promotion of non-formal and informal education in the digital era is governed by the National Education Act of 1999, which mandates three forms of education management: formal education, non-formal education, and informal education. The Promotion of Non-formal Education and Informal Education Act of 2008 is a key legislation that promotes and supports non-formal and informal education, with a particular emphasis on utilizing digital technology to create a modern, quality society and facilitate convenient access to education that meets the diverse needs of individuals. This aligns with the digital economy and social development plan of the Ministry of Digital Economy and Society, which aims to effectively manage education nationwide using digital technology (Waiyawut Boonloy, 2018). Given these circumstances, it is crucial for school administrators to possess effective leadership and professionalism. They play a vital role in leading educational institutions towards success by fulfilling the mission and responsibilities of the institution. School administrators require specific knowledge, skills, leadership abilities, and conducive characteristics. They need to create an environment conducive to learning and innovation, reduce teaching time while maximizing learning time, and engage in activities that enhance learning (Kanokorn Somprach, 2017). Additionally, school administrators must continually develop their skills, knowledge, and abilities, as they determine the direction of the organization and are integral to its success. In the digital era, school administrators must possess digital leadership skills, be adaptable to change, be technologically literate, apply technology to their work, and effectively utilize various technologies and innovations for organizational management (Rungrat Pholchai, 2020).

The leadership attributes of educational administrators in the digital era refer to the capabilities or processes that interact with leadership in facilitating change, fostering collaboration and shared learning, cultivating creative thinking and innovation, and the ability to motivate and inspire personnel to achieve organizational objectives. Illustrate the significance and relevance of this research, it draws upon synthesized concepts and theories from scholars and related research works, including Ekkachai Keesukpan (2016), Sukanya Chamchoi (2018), Chewin Onlaor and colleagues (2020), Sieber & Zamora (2013), Sheninger, E.C. (2019), Zhu (2014), Elliott (2017). In summary, five key components emerge, namely: 1) Creative thinking, 2) Participation 3) Digital citizenship, 4) Digital vision, and 5) Digital professionalism. These attributes encompass the following:

(1) Creative Thinking: This pertains to the behaviors exhibited by educational administrators that demonstrate their ability to create opportunities for staff to think freely, foster creativity, and continuously develop new ideas. It involves imaginative thinking, linking knowledge and experiences to generate new perspectives, and innovating and advancing ideas for application in management.

(2) Participation: Participation refers to the behaviors of educational administrators that emphasize teamwork, where individuals willingly engage in assessing work performance for efficiency. It involves active participation in work processes and providing motivation for staff to perform their duties enthusiastically.

(3) Digital Citizenship: This pertains to the behaviors of educational administrators that reflect their knowledge and competence in accessing and utilizing digital technology and media. It includes ethical digital usage, digital literacy, and digital communication.

(4) Digital Vision: Digital vision refers to the behaviors of educational administrators that demonstrate the ability to create a vision for incorporating digital technology into operations. This includes creating a vision that promotes development and innovation, a vision that is digitally oriented, and participating in planning.

(5) Digital Professionalism: Digital professionalism refers to the behaviors of educational administrators that highlight their expertise in using digital technology as part of educational development. This encompasses creating a digital learning environment, digital literacy, and technology management.

Considering the conditions, the researcher is interested in studying the development of indicators and leadership development guidelines for district directors of non-formal and informal education in the digital era. This research aims to benefit school administrators in their personal and professional development and provide valuable insights for policymakers. The findings will serve as a guideline for the effective development of leadership in the digital era for educational institute administrators under the Office of Non-Formal Education and Informal Education in the future.

2. Objectives of the Research

- (1) To study the components and leading indicators of the district directors of non-formal and Informal education in the digital era.
- (2) To examine the consistency of the leadership indicator structure model of the district directors of non-formal and Informal education in the digital era with empirical data.
- (3) To develop approach for leadership development of the district directors of non-formal and Informal education in the digital era.
- (4) To study the results of implementing the leadership development approach of the district directors of non-formal and Informal education in the digital era.

3. Methodology

This research is research with mixed methods divided into 4 phases as follows.

Phase 1: The study of components and leading indicators of the district directors of non-formal and Informal education in the digital era. The group of informants who examined the suitability of components and indicators was 5 experts by purposive sampling.

Phase 2: Examination of the consistency of the leadership indicator structure model of the district directors of non-formal and Informal education in the digital era, developed with empirical data.

- (1) The population includes the district directors of non-formal and Informal education, and the teacher who acts as the district directors of non-formal and Informal education in the Northeast, a total of 644 people.
- (2) The sample group was the district directors of non-formal and Informal education, and the teacher who acts as the district directors of non-formal and Informal education in the Northeast, by using the ratio criteria between sample units and the number of parameters or variables in factor analysis. In general, researchers use a sample with a ratio of 20:1 to the parameters studied. In this research, it was found that there were 20 parameters, so the sample size used in this research was 400 people, and were randomly selected by multi-stage sampling.

Phase 3: The development of leadership development approach for the district directors of non-formal and Informal education in the digital era. Informant group in a focus group to develop leadership development approach for the district directors of non-formal and Informal education in the digital era. and a group of informants who are responsible for evaluating the development approach. By evaluating the suitability/feasibility/benefit, 9 experts have been obtained according to the specified criteria.

Phase 4: To study the results of implementing the leadership development approach of the district directors of non-formal and Informal education in the digital era. The informants were 25 officers from the Namsom District non-formal and informal education center, Udon Thani Province Thailand, in the academic year 2022.

4. Research Results

The examination of the components and leadership indicators of district directors in the realm of non-formal and informal education during the digital era has yielded the following discoveries: Creativity: This component comprises three indicators, namely, fostering independent thinking, encouraging imaginative thought, and fostering innovative thinking. Participation: This component encompasses three indicators: engagement in assessments, active involvement in practical activities, and the promotion and support of motivation. Digital citizenship: This component comprises three indicators, specifically, adherence to digital ethics, proficiency in digital literacy and usage, and effective digital communication.

The evaluation of the consistency of the leadership indicator structure model for district directors in the domain of non-formal and informal education during the digital era, which was developed using empirical data, revealed that

the model aligns seamlessly with the empirical data, ranked by component factor loadings based on standardized scores from highest to lowest, the order is as follows: creativity, participation, digital citizenship, digital vision, and digital professionalism.

Furthermore, the results of implementing a leadership development approach for directors of non-formal and informal education centers in the digital age indicate a high level of overall suitability and benefit. This approach encompasses the following leadership components: creativity, participation, digital citizenship, digital vision, and digital professionalism. The assessment of satisfaction with the leadership development approach for the directors of the district center for non-formal and informal education in the digital era also indicates a high level of overall satisfaction.

5. Discussion

According to the study of the development of indicators and leadership development approach of the district directors of non-formal and Informal education in the digital era, the results can be discussed according to the following objectives:

(1) Leadership components of the district directors of non-formal and Informal education in the digital era consisted of 5 elements: 1) Creativity 2) Participation 3) Digital citizenship 4) Having digital vision and 5) Digital professionalism, consistent with Lersak Tama Sumalee Sriputtarin (2021) gave an opinion about the components of leadership in school administrators in the digital age that there are 6 elements as follows: 1) Vision 2) teamwork and participation 3) Having creativity 4) Digital technology skills 5) Motivation 6) Learning organization and consistent with Chewin Onlaor (2020) mentioned that leadership in the digital age must have characteristics that include promote communication, using information technology and having confidence in technology use skills (digital naive), be a person who has a hunger for new knowledge, willing to experiment with intellectual curiosity, can create new innovation for services, improve agility expertise to digital professionalism and creating and changing the vision to keep up with the changing world in the future.

(2) The results of the consistency test of the leading indicator measurement model of the district directors of non-formal and Informal education in the digital era with empirical data were found to be consistent with empirical data as follows:

1) Creativity found that the indicators with the highest weight of components namely, give opportunity for personnel to have freedom of thought because the director of the district center for non-formal education and Informal should be encouraged to have the knowledge and ability to use modern technology by using technological equipment in both operations and teaching and learning in a variety of ways and encouraging personnel to use technology to work creatively and have new ways of working and in line with the concept of Jinnawat Pakotang(2018) mentioned that learning management in the digital age has applied information and communication technology affect to teaching and learning more convenient and fast and consistent with Jiraphon Sungpho and other (2018) conducted research on leadership in managing the organization in the digital age found that the opportunity for personnel to express their opinions freely and will make personnel feel that they are valued important and motivated to work.

2) Participation, found that the indicator with the highest factor loading was participation in the evaluation because the director of the district center for non-formal education and informal education is a leader in education management from policy to practice for students and the general public. In which everyone will play a part in the success of the school and provide opportunities for all personnel to be supervisors and participate in auditing, evaluating, following up and having to define appropriate roles in the work, consistent with Kanokwan Rojan-uthai (2017) has studied the research on the participation in school administration of the Basic Education Institutions Board in schools under the Bangkok Metropolitan Administration found that participation in the benefits was at a high level, Likewise Preecha Tatlamai (2005) has studied the research on the relationship between school administrator's leadership style and school effectiveness found that exchange leadership of school administrators as a whole was positively correlated with school effectiveness and in accordance with Soonthorn Khotprathua (2008) that participatory management emphasizes the importance of motivating workers and building an organization towards that goal and result in higher worker productivity.

3) Digital citizenship, found that the indicator with the highest factor loading was digital ethics because at present there are many users of digital technology media sometimes those who use digital technology media may be used inappropriately channel of crooks to deceive the public. Therefore, they should behave as a good role model in using technology media properly and appropriately consistent with Nattakarn Sukonratnametee and Nuchprapha Mokhasart (2019) stated that media literacy is the choice to receive and make use of information by being able to

think analytically rationally which is consistent with Natthameth Dulkanit (2020) stated that the concept of media literacy media information and digital literacy that has been defined with access, analyses, evaluate, and communication capabilities, various information.

4) Having digital vision, found that the indicators with the highest component weight were: Creating a vision that promotes development creates innovation because the director of the district center for non-formal education and informal education has to self-development is required to keep pace with technological changes. Analyze the trends of modern technology advancements suitable for use in education management and be a leader that takes new technologies to use in their work to inspire and encourage personnel to use technology to develop work for higher efficiency consistent with Chewin Onlaor (2020) gave their views on the components of leadership in school administrators in the digital era must be created to change the vision and strategic plan to keep pace with the changes in the world in the future and consistent with Natthanicha Pornpathumchaikit (2021) has studied the research on Leadership in the Digital Age of School Administrators found that in the development of leadership in the digital era of school administrators, in terms of visionary executives should set a clear vision.

5) Digital professionalism, found that the indicator with the highest weighting component was creating a digital learning atmosphere shows that the director of the district center for non-formal education an informal education should develop oneself to have competency in using technology and encourage personnel to attend training to develop skills in using technology, There is an exchange of knowledge between personnel in educational institutions, organize training for personnel to use technology in their work, consistent with Chitrakorn Chansuk (2021) has studied the research on the study of components of digital leadership for school administrators of opportunity expansion school found that administrators must create a culture and atmosphere using digital technology and consistent with Sukanya Chamchoi (2018) gave an opinion on the components of leadership of school administrators in the digital age, found that administrators should develop themselves to be flexible, expertise to digital professionalism. It can be seen that in the management of educational institutions in this digital era administrators need to have a good understanding of communication technology and computer technology. To be able to choose to use with the management of educational institutions to be appropriate, worthwhile, and sufficient for use, especially the director of the district center for non-formal education and informal education must show the management potential and organize the various environments of the educational institutions to be modern and suitable for the various technological changes that occurred. In addition to affecting the image of the school in the community, it will also make the school trusted by the community in providing sustainable quality education.

6. Suggestions

6.1 Suggestions for Applying the Research Results

From the research on The Development of Indicators and Guidelines for Leadership Development of the district directors of non-formal and Informal education in the digital era. The researcher has suggestions for applying the research results as follows:

(1) From the results of the research it was found that the Leadership of the district directors of non-formal and Informal education in the digital era consists of: 1) Being creative 2) Participation 3) Digital Citizenship 4) Having Digital Vision 5) Digital Professionalism. Non-Formal and Informal Education District Center can apply this basic information as a guideline for leadership development of the district directors of non-formal and Informal education in the digital era as appropriate to the context of the educational institution to organize teaching and learning activities and operation for maximum efficiency.

(2) Leadership development of the district directors of non-formal and Informal education in the digital era It is important that all parties involved should be aware and allow educational institution administrators to participate in planning and scheduling activities together and there should be a guideline for developing the leadership of the district directors of non-formal and Informal education in the digital era and a variety of development methods for educational institute administrators to create a body of knowledge have technical skills in management.

6.2 Suggestions for Further Research

(1) Research should be conducted on Development of leadership indicators and approaches for the district directors of non-formal and informal education in the digital era with the sample group in other regions of the country to compare the findings that are similar or different If there are differences, they will be taken into account the different causes, if they are the same, will confirm the findings, which will make the findings more reliable.

(2) Factors affecting the leadership of the district directors of non-formal and informal education in the digital era to be used as an approach for educational management and continue to develop the leadership of the district directors of non-formal and informal education.

7. Conclusion

In conclusion, the study on district directors of non-formal and informal education in the digital era highlighted the importance of creativity, participation, and digital citizenship as key components for effective leadership. The findings indicated that the developed leadership indicator structure model aligned well with empirical data, with creativity, participation, digital citizenship, digital vision, and digital professionalism being the prioritized components. The formulated leadership development guidelines provided valuable insights for directors of non-formal and informal education centers, emphasizing the significance of creativity, participation, digital citizenship, digital vision, and digital professionalism in their roles. The result of the leadership development approach implemented at the Nam Som district center revealed high levels of satisfaction among the participants. These results contribute to a better understanding of leadership in the digital era and provide an approach for enhancing leadership practices in the field of non-formal and informal education.

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