

## Development of an Academic Administration Model on a Digital Platform to Enhance the Quality of Life and Competence Amongst Underprivileged Students in Wat Si Don Chai Municipal Community School, Chiang Mai Province

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### Abstract

This research and development study consists of the following objectives: 1) to study basic information in developing a digital-based academic administration model to promote the quality of life and competency of underprivileged students in urban communities, 2) to develop an academic administration framework using digital technology to improve underprivileged students' quality of life and academic competence in a Municipal Community, 3) to determine the overall results from the model, and 4) To evaluate the outcomes. The study's informants were Wat Si Don Chai Municipal Community School personnel. This included 2 School Deputy Directors, 36 teachers, and 5 representatives from the Education Committee, bringing the total to 43 people. The study also included 247 students from kindergarten 1 up to Mattayom 3 who were in their second semester for the year 2021 and who fit the criteria set by the Wat Si Don Chai Municipal Community School for underprivileged students in the area. The research instruments used for this study were questionnaires, interviews, group meetings on guidelines to operate according to the framework provided, digital skill evaluation forms for personnel, evaluation of teachers' capability to enhance students' competence, evaluation of students' quality of life and competence and a satisfaction survey. Statistics used in data analysis consisted of determining frequency, percentage, mean and standard deviation, and descriptive analysis. The results from the study showed that 1) An effective academic administration model. To do so, it is imperative to develop a curriculum that aims at competency and at the same time, also develop a digital, online learning management system. It is also important to promote further research that aims to solve key issues amongst underprivileged students. The academic administration should also develop a learning center that focuses on building occupational skills, along with developing a network that can help the underprivileged. Finally, the framework also consists of educational supervision that can empower the students. 2) After implementing the model, it was found that increase in the staff's digital skills and increase in their ability to manage the learning emphasizes competency, quality of life of student, and competency also increased. 3) Finally, the school's personnel were also satisfied at a high level with the model provided.

**Keywords:** Academic administration, Digital platform, Digital skills, Quality of Life, Student competency

## Introduction

At present, Thai society is still faced with an ongoing issue of inequality in the education sector and this has either resulted in the halting of education mid-way or not completing higher levels of education amongst underprivileged students. Apart from the lack of adequate access to education, underprivileged students are also faced with other issues such as social discrimination at school or other educational institutions. Moreover, underprivileged children who are financially poor are discriminated against at a much higher level than other children. In the past, the rules and regulations implemented by the government haven't been effective to resolve the aforementioned issues amongst underprivileged children who have poor families, are stateless, or are migrants. Furthermore, it is anticipated that the integration into the ASEAN community and a borderless state will contribute to the exacerbation of the challenges related to migration and displacement, affecting not only migrant workers but also refugees, internally displaced persons, homeless individuals, and children from disadvantaged families. Therefore, if we remain unaware of the direction and severity of the impending issues, and if the government and relevant organizations do not take prompt and serious action to prevent and address these problems consistently, it is anticipated that Thailand will face severe challenges in terms of the quality of its human resources in the near future (Tumthong et al., 2014).

Wat Si Don Chai Municipal Community School is located in the city of Chiang Mai province. The community surrounding the school is densely populated and most students residing in the communities belong to poor families and reside in houses along the Mae Kha canal. The community consists of locals, hill tribe people, and migrants who have come to live or work in the area. The locals are composed of those who have been living in the area for generations, emigrants who have relocated from various regions, and those who have relocated from other provinces to earn a living. The living conditions in the community are quite poor, with a lack of proper housing arrangements and a lack of access to basic hygiene and cleanliness. Apart from the crowded living area, the school is also located in the central area of the community, surrounded by other places such as markets, hotels, companies, and various shops (Wat Si Don Chai Municipal Community School, 2021). The children who enroll in Wat Si Don Chai Municipal Community School come from diverse ethnic backgrounds. According to a preliminary survey, it has been found that approximately 54% of the students are underprivileged, non-Thai nationals, or children of migrant workers. This percentage is considered relatively high (Faculty of Education, Chiang Mai University, 2022). Wat Si Don Chai Municipal Community School has set a goal for students to achieve a quality education that meets the standards set by the school and the Chiang Mai Municipality. The affiliated departments continue to provide support in terms of budget allocation for continuous and consistent educational development and management. Additionally, the school has received cooperation from the Office of the Basic Education Commission, parents, the community, and various organizations to actively participate in activities that promote the school's development in terms of providing education. This is reflected in the school's vision statement: "Wat Si Don Chai Municipal School strives to be an excellent educational institution that produces well-rounded students and highly-qualified teachers in an inclusive administration" (Wat Sri Don Chai Municipal School, 2021). Academic administration in Wat Si Don Chai Municipal School is one of the main and most important aspects in terms of fostering knowledge, capability, essential skills, and desirable qualities among students and as outlined in the school's objectives. School directors who prioritize academic administration as one of their main duties

are able to raise the quality of education. On the other hand, if there isn't much importance placed on improvising the academic administration, with resources being used in other, less important areas, the education institution won't be able to reach its goals in terms of developing quality education (Songwongnam, 2008). Thus, it is necessary to have a proper framework that outlines the proper development of academics and that also takes into account the environment of the educational institute (Boonpim, 2010).

The progression of development of academics in any educational institute requires the active involvement of both the school personnel and relevant stakeholders. Apart from that, having the local communities engaged is one of the most important factors which contribute to the development of the nation. Therefore, the concept of involving communities or the general public in development efforts in all aspects is presently a view that is widely adopted and accepted (Ketchaona, 2011). Active involvement of individuals creates a space for the collaboration of unique skills and ideas, thereby maximizing the benefits for the organization. The leaders and followers have an important role of working together to solve various problems that arise within the organization and to also adapt strategies within the administration in a manner that's appropriate to the current situation (Phromnikorn, 2011). An administration that embraces collaboration will directly impact the education system in the following three aspects: 1) Higher academic achievement among students 2) Successful operation of the school that creates a strong network built on the foundation of education and 3) Collaboration with the community will foster positive relations between relevant parties (Kwanpracha, 2013). A school academic director in today's age not only has to oversee the academics of the educational institute but also lead the use of digital technology in both the administration and classroom so that both educators and learners have the necessary digital knowledge and skills in their hands to reach the targets outlined in the modern curriculum (Ngamkanok, 2021). Effective practices for managing information and communication technology in digital-era educational institutions include accepting the introduction of technology and changing school personnel (Machek, 2022). The use of digital technology as a foundation for academic administration is prevalent in many areas today, especially with the increasing adoption of online learning. The educational directors and executives utilize information and communication technology to support the school's administration, enabling them to efficiently support and develop the school's curriculum (Ngamkanok, 2021). An educational institute's administration in the current age of digital technology plays a very important role in developing a system of management to raise the quality of learning via the use of information technology. Moreover, teachers, students, parents, and other stakeholders should also have access to technology, news, learning resources, and other services provided by the school. Effective planning and implementation are crucial in developing a digital technology system that capable of providing services to all stakeholders (Machek, 2022).

Based on the aforementioned reasons, The researcher is therefore interested in developing a digital model of academic administration to improve the quality of life and competency among underprivileged students in the municipal community. The digital model of academic administration will make the system more efficient and of high quality as its main aim would be to promote a learning environment that focuses on students' quality of life and competency, especially among the underprivileged children residing in the municipal community. Under the administration process that promotes the involvement of all stakeholders, there will be opportunities for collaboration and the learning of key roles and responsibilities. Clear guidelines and shared learning experiences will be established within the context of Wat Si Don Chai Municipal School. This will enable the academic administration to achieve its goals efficiently, bringing benefits to students, teachers, educational personnel,

the school, and the community. Furthermore, it will also provide a clear direction for the future development of education in our nation.

### **Research Objectives:**

1. To study essential data in order to develop a digital academic administration framework to enhance the quality of life and increase competency amongst underprivileged students at Wat Si Don Chai Municipal Community School.

2. To develop an academic administration framework using digital technology to improve underprivileged students' quality of life and academic competence at Wat Si Don Chai Municipal Community School.

3. To study and analyze the outcomes of using the digital model of academic administration to support and enhance the quality of life and competency amongst underprivileged students at Wat Si Don Chai Municipal Community School.

4. To determine the satisfaction levels of using the digital model of academic administration to improve underprivileged students' quality of life and competency at Wat Si Don Chai Municipal Community School.

### **Methodology**

Step 1 Studying and gathering essential data in order to develop a digital academic administration model to enhance the quality of life and increase competency amongst underprivileged students in the municipal community.

1.1 The information group on the conditions and problems of participatory academic administration included the personnel of Wat Sri Don Chai Municipality School consists of 2 deputy directors of the educational institution, 36 teachers, a total of 38 people, and the group that provided information on factors that facilitate participatory academic administration included the 3 directors with best practices.

1.2 The instruments used to collect research data are the questionnaire about conditions, problems, and factors contributing to participatory academic administration. It has a discriminatory power value ranging from .31 - .84 and a reliability value for the entire version equal to .84. The interview form for directors of schools with best practices passed a quality check by 5 experts who helped check the language clarity and appropriateness of the interview topic.

1.3 The information gathered during this step can be divided into two subtypes:

1.3.1 Identifying the main problem and key factors that would support the development of an academic administration on a digital platform to increase student quality of life and competency at Wat Si Don Chai Municipal Community School. The source of the primary data consisted of the school personnel, including 2 Deputy Directors, 36 teachers, and 5 representatives from the Education Committee. This brought the total to 43 people.

1.3.2 To study the operation model as outlined by experts in the field. This includes educational directions whose line of work is similar to the objectives of this research. The best practices in the following areas will then be examined: 1) Academic Administration 2) Using digital technology as a foundation for learning 3) Improving the quality of life and competency of students. To gather data to support the model, the directors of Wat Sri Suphan Municipal School, Si Ping Muang Municipal School, and Tha Satoi Municipal School were consulted. Each school had one director, bringing the total to 3 people.

1.4 Data were analyzed by finding the mean and standard deviation, and present the results in the form of tables accompanying the description. Using 5 levels of criteria for interpreting results.

Step 2 Development of an Academic Administration model using digital technology to enhance the quality of life and competency of underprivileged students in the municipal community.

2.1 The information group of providers used in expert-based seminars (Connoisseurship) to check the format and a manual for using the participatory academic administration model Obtained through purposive selection, including 10 qualified people with knowledge Expertise, and experience in academic administration.

2.2 The instruments used to collect research data are the model quality check form and quality inspection form of the model user manual passed a quality check by 5 experts who helped check the language clarity and appropriateness of the questions topic.

2.3 The information gathered during this step can be divided into two subtypes:

2.3.1 Organizing a workshop to implement a proper framework and issue instructions for the operation of the Academic Administration model that's built on the foundation of digital technology. The workshop was attended by the Department of Education of Chiang Mai Municipality whereby Purposive Sampling was used to select scholars from the institution of education who are experts in the field of Academic Administration on a digital platform. The sample group consisted of the top executive of the Department of Education of Chiang Mai Municipality, the Director and 2 Deputy Directors, 36 educators, and 5 representatives from the Education Committee, bringing the total number to 46 people.

2.3.2 Employing Connoisseurship to verify the model and guidelines of the usage of the digital academic administration framework. Purposive Sampling was used to select experts in the field and included 5 academic scholars from the institution of education who are experts in the field of Academic Administration on a digital platform and 5 administrators from the educational institution who have an academic standing, bringing the total number of people in the sample group to 10.

2.4 Data were analyzed by finding the mean and standard deviation, and present the results in the form of tables accompanying the description. Using 5 levels of criteria for interpreting results.

Step 3 To study the outcomes of using the digital-based model of academic administration to improve the quality of life and competency of underprivileged students in a Municipal Community. To do so, the digital model and its guidelines for usage were implemented in the school for a duration of one semester. The study of the outcome can be divided into 3 sub-steps:

3.1 The informants' group in the study of operating results according to the model included the personnel of Wat Sri Don Chai Municipality School consists of 2 deputy directors of the educational institution, 36 teachers, a total of 38 people.

3.2 The instruments used to collect research data are the personnel digital skills assessment form, the assessment of teachers' abilities in organizing competency-based learning with an IOC value between 0.80 - 1.00, the assessment of the quality of life of underprivileged students in urban communities with the reliability value for the whole version was equal to .87, and the student competency assessment form with the reliability value for the whole version was equal to .81.

3.3 The information gathered during this step can be divided into four subtypes:

3.3.1 Doing a test run of the digital-based academic administration model and guidelines at Wat Si Don Chai Municipal Community School. The target group for the

implementation of the framework and guidelines were 39 personnel from Wat Si Don Chai Municipal Community School.

3.3.2 Observation, follow-up, and evaluation of the results obtained from conducting the test run of the model and guideline of the digital-based academic administration at Wat Si Don Chai Municipal Community School. The informant group was personnel who observed, followed up, and evaluated the trial run and satisfaction of the model. The group consisted of 36 teachers and 5 representatives from the Education Committee, bringing a total to 41 people.

3.3.3 Examining the digital skills of the school personnel and studying the ability of teachers to manage lessons that focus on competency when using the digital-based model and guidelines for academic administration that aims to improve the quality of life and competency among the underprivileged students at Wat Si Don Chai Municipal Community School. The informant group who provided data to reflect the result of the usage of the model were 43 personnel from Wat Si Don Chai Municipal Community School.

3.3.4 Evaluation of the quality of life and competency of students from Kindergarten 1 up to Mathayom 3 for the second semester of the year 2021. These students were identified by the Wat Si Don Chai Municipal Community School to be underprivileged. The total number of students evaluated was 247.

3.4 Analyze data to compare operating results by converting the data to percentages and finding the difference in percentages between before and after operations according to the model.

Step 4 To determine the satisfaction among participants who operated based on the model and guidelines for a digital-based academic administration to improve the quality of life and competency among underprivileged students in a Municipal Community.

4.1 The informant group was the personnel of Wat Sri Don Chai Municipality School consists of 2 deputy directors of the educational institution, 36 teachers, a total of 38 people.

4.2 The instruments used to collect research data is the satisfaction assessment form for operating according to the model with an IOC value between 0.80 - 1.00.

4.3 Data collection was carried out with a satisfaction assessment form on the digital-based academic administration model with the group of informants after the model was completed until the process was completed.

4.4 Data were analyzed by finding the mean and standard deviation, and present the results in the form of tables accompanying the description. Using 5 levels of criteria for interpreting results.

## Results

1. The preliminary data involved in the development of a model of academic administration that uses digital technology as its base to enhance the quality of life and competency of underprivileged students in a Municipal Community, it was revealed that the school personnel had a medium level of usage of cloud technology to store the body of knowledge and important documents related to the development of a curriculum that fulfills the student's needs and interests. Moreover, there was an overall significant issue in the usage of cloud technology, and finally, the need to develop in this area was at the highest level of requirement. Another key part of the model is using websites to support the teacher's role of compiling lessons and using them as a medium to convey knowledge to the students in a way that interests them. From the study, it was revealed that there was a significant level of usage of websites among school personnel. However, there was also a high level of issues in using websites and the need to develop in this area was at the highest level of requirement. The third factor is using social media and other sites to explore information in the field of research and troubleshoot student issues, manage classrooms, and evaluate their performance via exams. It was revealed that the school personnel were using social media and other sites at a medium level and there were significant issues in usage. Thus, this resulted in a high need to develop further in this area. Next, there was a medium level of usage among school personnel of mobile applications to store digital information and use multimedia to encourage learning. Moreover, there was also an overall significant issue in the usage of mobile apps, thereby resulting in the need to develop in this area at the highest level. Using social media to build a network and to find third-party sponsors to create a learning center and to help underprivileged students is also an important component of the digital academic administration model. The results revealed that the school personnel used social media at a medium level and that there was a high level of issues in this area. Thus, there was also a great need to develop further in this component. Lastly, the use of social media and websites to reflect the overall impact on both qualities of life and competencies of regular students and disadvantaged students revealed that the staff faces significant operational issues, a high level of overall problems, and a pressing need for development.

2. The digital-based academic administration model was designed and developed to enhance the quality of life and competency among underprivileged students in a Municipal Community. It is not only highly appropriate for usage at the school but is also very feasible and has the highest benefits. It contains 6 components as follows:

Component 1: The basic principles of the model include: 1) An academic administration that has participative management and that focuses on empowerment can be achieved by creating a sense of trust among administrators, personnel, and the community. 2) An efficient academic administration requires utilizing digital technology as a foundation for managing and developing the competencies of personnel towards excellence by managing complex data, and use for advancement of student competency. 3) Managing digital technology for learning includes using social media to support inquiry-based learning and facilitate communication and collaboration among personnel in the school. 4) Management of learning focuses on student competency and improving the quality of life of underprivileged students in a Municipal Community requires the preparation of a curriculum and learning that is in conformity with the needs of the underprivileged students. 5) Management of learning that emphasizes competency and enhancing the quality of life of underprivileged students in a

Municipal Community requires establishing networks and external support resources in order to be equipped and ready to use technology in learning.

Component 2: The objectives of the model can be divided into four types: 1) To employ digital technology to support learning and to develop digital skills of personnel to manage competency-based learning that enhances the quality of life of students. 2) To use digital technology to aid in learning and the development of teachers' ability to manage learning in a way that enhances students' quality of life. 3) To employ digital technology to track, evaluate and improve underprivileged students' quality of life at Wat Si Don Chai Municipal Community School. 4) To use digital technology to track, evaluate and improve underprivileged students' competencies at Wat Si Don Chai Municipal Community School

Component 3: The functioning system and protocol of the model can be divided into three distinct parts: 1) The Participative Management System where the administrators of the educational institute issue the protocol for the model's operation for the teachers, parents, community, and the Education Department Committee. They play a role in collaboratively planning the school's curriculum and learning objectives, keeping the students as the primary focus. The model also requires a willingness to work together to ensure that the processes happen in a methodological manner. Moreover, the proper functioning of the model also requires the participation of the stakeholders in the decision-making process and allows them to also be a part of the operation of the model, ensuring that they receive proper information about the beneficial outcomes of the model and also be part of the evaluation. 2) The Empowerment building system whereby the administrators of the educational institute ensure the smooth propelling of creating a sense of empowerment by assigning roles, laying clear sets of rules to carry out one's responsibilities in an excellent manner, organizing further training and development, providing up-to-date knowledge and feedback and approving requests. Moreover, they should exhibit qualities of trustworthiness, acceptance of mistakes, and respect towards those who are involved in the decision-making process. These are the roles and qualities that administrators should possess in catalyzing positive changes in the educational institute and that will impact teaching practices. This includes carrying out one's responsibility to ensure proper management of learning and building a network based on relationships and connections that involve both parents and communities, with the teacher playing the role of cooperating with parents to develop and resolve key issues to help build good character among students. The students will then possess competency and have a quality of life that meets the standards and objectives set by the school. 3) The final objective of the model is a system that supports the usage of Digital Technology to aid in learning. The catalysts of this system are the directors and teachers of the institute, who will ensure that the usage of digital technology in the classroom can help children develop desirable characteristics, competency, and good quality of life as aligned with the objectives set by the educational institute. To do so, they can use cloud technology to store the body of knowledge and important documents related to the development of a relevant curriculum that engages the students. Another technique is to use websites that can help teachers create effective lessons and teach certain topics in a way that interests the students. Furthermore, using social media and other websites to collect data for research and troubleshoot issues that students face is also a way through which digital technology can be used in the classroom. Teachers can also employ digital technology to manage the learning outcomes in a class and to evaluate the students' performance. Moreover, the usage of mobile apps to store digital information and use multimedia to encourage learning is an important aspect of the model too. Using social media to build a network and to find third-party sponsors to create a learning center is also part of the model. Finally, the system requires

using social media and the Internet to reflect the impact on both the quality of life and competency of normal and underprivileged students in the line of education.

Component 4: The implementation of the framework can be divided into six steps as shown below: 1) Developing an educational curriculum that emphasizes competency is a type of academic management that promotes the development of not only the school curriculum but also the curriculum of specialized and short-term subjects. It focuses on enhancing competencies and improving the quality of students' lives, reducing disparities, and helping disadvantaged students to realize their full learning potential. It aligns with the needs of society, communities, and the country. The process of developing a curriculum for all personnel to have a part in includes: 1.1) Analyzing the environment and assessing the school's situation to establish a vision, mission, goals, and desired goals, with the involvement of all parties. 1.2) Developing a curriculum structure that aligns with the vision, mission, and desired goals, while integrating content within and across subject areas based on relevance and appropriateness. 1.3) Implementing the curriculum in teaching and managing it effectively and appropriately. 1.4) Monitoring, evaluating, and continuously improving the curriculum to ensure its relevance and suitability within the context of the school. 2) The development of learning management that emphasizes digital technology and online tools. This is a form of academic administration that can help teachers generate learning plans that use digital technology and online resources that contain all the topics learned in class. The online resources created by the teacher will then allow the students to access them again if they are in confusion about a topic or if they have missed a class due to situations where they must help out their parents earn a daily living. Having easy access to online materials for classes ensures that the students don't lag behind in their studies even though they miss some classes. The steps required for all personnel in developing a learning management plan that is online and digital-based are: 2.1) Implementing policies that help teachers in designing a learning plan that is aligned with the student's level and interest and also instills good virtues and values and helps in the development of character. It should also enhance the quality of life and competency of learners. 2.2) Creating an atmosphere and body of knowledge that is in favor of active learning. 2.3) Using local wisdom or connections with parents, community, and stakeholders to help manage the process of learning in a suitable and relevant manner. 2.4) Organizing classroom observations for teachers to participate in learning and providing friendly guidance and suggestions for collaborative learning and teaching development, as deemed appropriate. 2.5) Supporting teachers in their continuous professional development to enhance their ability to design effective learning and classroom management techniques. 3) Promoting research to address the needs of underprivileged students is another part of the academic administration. It consists of the following steps that should be followed by all personnel: 3.1) Instructing teachers to analyze the key issues that underprivileged students face in their homeroom classes. 3.2) Organizing group activities that aid in the development of research topics that focus on resolving the problems faced by underprivileged students by integrating teaching and learning with the creation of career opportunities and supplementary income for students during their studies. 3.3) Organizing workshops that develop learning activities in each subject area by integrating them with strengthening local communities. Research can focus on developing short-term curricula or learning units that incorporate vocational skills relevant to the local area, providing students with increased opportunities for employment and income generation for their families. 4) Developing a media and learning center that focuses on skill development. This process involves the research and development of innovative media and resources that are directly related to the management of academics in order to develop essential skills among students that could enable them to help their families create additional careers and income. The emphasis

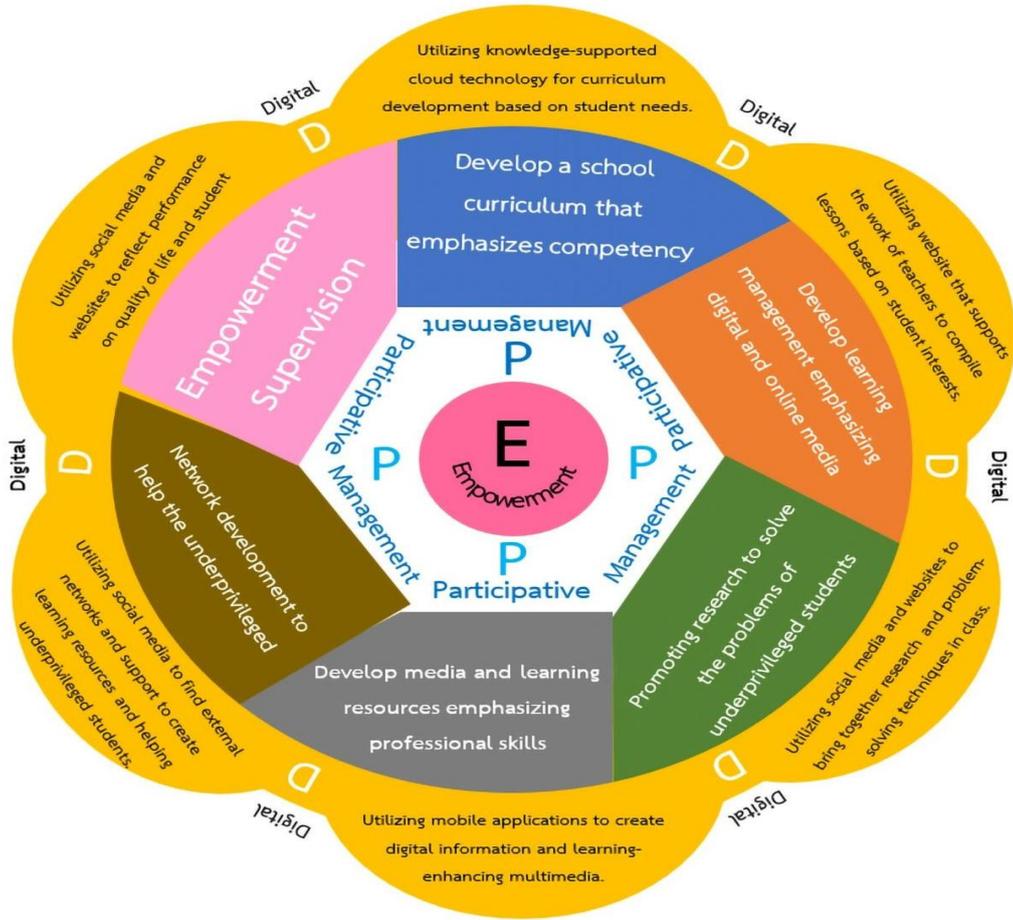
should also be on resources and mediums that conforms to the locality. To develop this media and learning center requires the following steps: 4.1) Study and analyze the necessity of using media and learning resources for teaching and academic management. 4.2) Promote teachers to produce and develop media and innovative teaching methods. 4.3) Source media and technology for use in teaching, learning, and academic development. 4.4) Promote the joint collaboration in the production, sourcing, development and utilization of media and technology in an innovative manner for academic management. Moreover, it also involves the advancement of the academic administration among educational institutions, individuals, families, organizations, departments, and other institutions. 4.5) Evaluation of the outcomes of using innovative media and technology in teaching and determining whether they're successful or not. 5). Building a network to assist underprivileged children is a process that involves the utilization of various resources by the educational institute that would help the underprivileged and other students to have easier access to knowledge and media centers that fulfill the learning needs and is appropriate for them. In order to develop this network in practice, the following steps are required: 5.1) Collecting information from parents, government agencies and relevant documents that would aid in the development of students both in and outside the educational institutes. 5.2) Compiling documents that disseminates information about funding sources and resource support that teachers can access and use if they wish to coordinate with some of the sponsors to receive support. 5.3) Establish and develop a learning and knowledge center to aid in the advancement of collaborative learning that is more efficient and economical. 5.4) Promote and support the teachers to use the learning centers both in and outside the schools so that they can manage the curriculum that encompasses local wisdom. 6) Empowering Supervision involves instilling willpower, mindfulness and discipline while ensuring the continued development of academic management techniques for the teachers. To reach this objective, the following practices should be observed: 6.1) Creating a supervision system in the academic and teaching departments within the school. 6.2) Operating the supervision system in a diversified manner that is appropriate for the school. 6.3) Evaluate the process and outcomes of implementing the supervision system within the school. 6.4) Follow-up and coordinate with the local education department to develop and process a supervision and teaching system for the educational institute. 6.5) Exchanging ideas and experiences and implementing a learning support system not only within the school but also in other schools or learning support institutes in the area.

Component 5: Methods to evaluate the outcomes of the model incorporates the use of rubric scoring, which can be divided into four types: 1) Assessing digital skills among the school personnel 2) Assessing teacher's ability in the management of learning that focuses on student competency 3) Assessing the quality of life of students and 4) Assessing and evaluating students' competencies.

Component 6: The conditions and restrictions of utilization of the model are as follows: 1) The development of the curriculum at Wat Si Don Chai Municipal Community School will take into account the latest guidelines laid by the Head Office of the Basic Education and follow the policies implemented by the Ministry of Education (2003). The policies and guidelines clearly define goals for student competencies, learning outcomes and course duration. 2) The head of the academic administration department should possess the following qualities: 2.1) Having a vision and the ability to lead the school towards collaborative administration. 2.2) Possessing the leadership qualities to facilitate the transformation towards competency-based learning. 2.3) Being dedicated, willing to make sacrifices, having a strong will power and ideologies that dictates to being a professional leader. 2.4) Possessing knowledge and experience in collaborative academic administration, with notable achievements. 2.5) Having

the ability to mobilize resources to efficiently manage academic affairs and achieve greater results. 3) Being dedicated as the administrator to build networks that allow collaborative development of the academic administration. This includes promoting collaboration with parents, students, community leaders and other organizations that are important sources of knowledge to develop competency among students and also are a source of funding of resources to aid the education of underprivileged students. 4) Support from affiliated agencies that promote the use of digital technology in the academic administration to enhance the quality of life and increase competencies among students who are underprivileged in the Municipal Community. This includes supporting and distributing power to schools so that they are better equipped in the field of academic management and that they have a proper budget for the procurement of technology. 5) Affiliated agencies can be a source of motivation for administrators, teachers and other personnel within the school and allow them to have the will power to manage academics. Moreover, it will also empower the other personnel within the school to continuously adapt the curriculum to changing times.

Based on the 6 components of operation of the model described in this paper, the following PED model simulation can be generated.



**Figure 1** The Digital-Based Academic Administration model to enhance the quality of life and competency among underprivileged students

3. A study of the results of operations according to the digital-based academic administration model found that personnel have digital skills and the ability to manage learning that emphasizes competency on average has increased. Regarding students from underprivileged groups in urban communities Quality of life and average performance increased at every level. As shown in Table 1.

**Table 1** Comparison of results between before and after the implementation of the digital-based academic administration model

<b>Evaluation list</b>	<b>%Before</b>	<b>%After</b>	<b>%Progressive</b>
<b>1. Personnel</b>			
- Digital skills	69.57	81.07	11.51
- Ability to organize competency-based learning	73.6	87.2	13.6
<b>2. Students in underprivileged groups in urban communities</b>			
- Quality of life	62.38	71.48	9.10
- Competency	66.74	71.95	5.21
<b>Total</b>	<b>68.07</b>	<b>77.93</b>	<b>9.86</b>

4. Results of the satisfaction with the operation of the digital-based academic administration model to enhance the competency and quality of life of underprivileged students at Wat Si Don Chai Municipal Community School revealed that overall, the school personnel were satisfied at a high level with operating under the guidelines of this model. As shown in Table 2.

**Table 2** Results of the satisfaction with the operation of the digital-based academic administration model

<b>Satisfaction issues</b>	<b>Mean</b>	<b>S.D.</b>	<b>Interpret</b>
1. Preparation for academic administration	4.54	0.57	Highest
2. Academic administration operations	4.45	0.60	High
3. Achievement results from academic administration	4.33	0.66	High
<b>Overall</b>	<b>4.44</b>	<b>0.61</b>	<b>High</b>

## Discussions

1. A study of the preliminary data required in the development of a digital-based model of academic administration revealed that there was a high to highest level of need to implement this model among the school personnel in the following 6 areas: 1) Using cloud technology to store knowledge and relevant data that would be resourceful in creating curricula that satisfies the needs and interests of students. 2) Using websites that aid teachers in generating lessons and instructional media according to students' interests. 3) Using social media and other sites to gather data for research, solve student problems, manage learning, and evaluate learning outcomes via examinations. 4) Using mobile applications to create digital information and learning-enhancing multimedia. 5) Using social media to find external networks and support to create learning resources and help underprivileged students and 6) Using social media and other sites to reflect the outcomes of the model on underprivileged students' quality of life and competency. The results from this study are similar to the research carried out by Dhammaviriyo et al. (2021) who revealed in his study that some of the education personnel of the institute lacked proper knowledge in using various forms of multimedia that are appropriate for students in their teaching. This includes the usage of software and applications such as Zoom and Google Meet to store important announcements and resources for the class and carry out meetings, allowing students to independently study online. Additionally, it was also found that incorporating the use of technology as an instrument to enhance the quality of students resulted in ease of management of lessons for both teachers and students. However, the teachers still had some doubts and concerns about developing digital knowledge and skills because it is something that is always changing and evolving. This is also reflected in a study conducted by Ngamkanok (2021), where it was explained that the school administration needs to develop a learning culture that takes into account today's digital technology and exhibits the qualities of a responsible citizen to aid in the evolution of the digital era. Moreover, the results are also aligned with the research conducted by Machek (2022) where it was found that the proper management of information and communications technology in schools requires acceptance from relevant personnel about the changes that it would bring about. It also requires supervision, follow-up, and support of technology for classroom and lesson management by teachers and for independent learning by students.

2. The outcomes of developing the digital-based academic administration model to enhance the quality of life and competency among underprivileged students in a municipal community resulted in the creation of a model that consists of the following six steps: 1) Developing a school curriculum that emphasizes competency. 2) Develop a classroom and learning management system that is built on online and digital platforms. 3) Promoting research to identify and solve the issues faced by underprivileged children. 4) Developing a communication and resource center that focuses on building vocational skills. 5) Building a network to aid underprivileged children. 6) Empowerment based supervision. It was found that this model has a high level of appropriateness, a high level of feasibility, and the highest level of benefits. This is because the digital-based academic management system that's developed has components that conform to the concepts and principles of Participative Management, Empowerment, and Digital Technology. Moreover, the process of building the system and its mechanisms requires the involvement and trust of personnel, parents, and the Education Committee, as it will aid in further improvement of the quality of life and competency among students in general and also for underprivileged students. The results are similar to the research conducted by Gamage (2022) who found that the school director should invoke a sense of trust

among the stakeholders of the school and should strive to be a balanced representative of the Advisory School Council. Additionally, Gamage (2022) also used the principles of empowerment as a backbone of academic administration. This promoted the collaboration of personnel in completing academic tasks and expanding their knowledge about digital technology. In the process of instilling a sense of empowerment, the personnel became better at decision-making and also invoked the head of teachers to have better initiatives and the courage to make big decisions. The outcomes of the model also conform to the research conducted by Ertürk (2022) where it was revealed that the school director's attitudes toward developing ability play a very important role in molding the teacher's perception of feeling included in the organization. This, in turn, would result in an accumulation of leadership qualities, benefiting the administration of the educational institute immensely.

3. The results of the effects of running the digital-based academic administration model to enhance the quality of life and competency of underprivileged students in a municipal community are shown below:

3.1) The digital skills of the personnel improved after implementation. The reason is due to the model acts as an empowering source for teachers to develop a classroom management system that focuses on online and digital resources. Thus, it motivated teachers to put continued efforts to further their knowledge by using technology and online sources of communication to help in teaching and learning. As a result, the teachers gained more skills in the digital area. These findings conform to those obtained by Ngamkanok (2021), where it was revealed that the school administration needs to adapt to the changing times and introduce the utilization of Information Technology to help with administrative tasks. The results also reflect the opinions of Machek (2022), who explained that the school's administration in the digital age has an important role in developing an administration system that elevates the quality of education for students via the usage of information and communication technology.

3.2) The personnel's ability to manage competency-based learning increased. Because the model that was implemented focused on the development of a school curriculum that focuses on competency. It focused on the management of developing subject-based curricula and short-term curricula to developed was to improve competency and enhance the quality of life among underprivileged students, reducing disparities and maximizing their learning potential. It would also allow the school to focus on the practical application of knowledge by students and enable them to integrate the knowledge into different, specialized fields where they can further hone their practical knowledge and skills to achieve success in their practice. These findings are aligned with the research conducted by Ramazan Ertürk (2022) where it was found that the school director's attitudes toward developing ability play a very important role in molding the teacher's perception of feeling included in the organization and that it allows the teachers to continually fulfill their potential.

3.3) Upon comparing the quality of life of the underprivileged students at Wat Si Don Chai Municipal Community School, it was found that the overall quality of life improved for all grade levels. This is attributed to the process of promoting research to resolve critical issues faced by underprivileged children and also due to building a network to help the underprivileged. The implementation of the model emphasized resolving key problems and assisting underprivileged students, whereby the system and its processes included the participation of all parties. This shows that an academic administration that focuses on enhancing the students' quality of life allows every subject group to be aware of their responsibility in identifying the problems faced by students and actively searching for solutions through practical research in the classrooms. Apart from that, an Empowerment Supervision system also plays an essential role in boosting confidence among teachers and helping them become leaders in creating a learning framework that integrates with the support system for the students. These findings are also reflected in the

study conducted by Wongsuwan & Siriwan (2017), where it was found that a collaborative administration can help the organization function in a smooth manner where everyone has a sense of love and loyalty towards the organization. A collaborative and inclusive administration also creates a positive environment where everyone is responsible for the tasks they have to carry and comes up with plans involving collaboration as a team to raise the organization's capacity. This enables the administration to gain acceptance and trust from the employees, who feel inspired and motivated to work, thereby creating a good relationship between the two parties. It also makes room for acceptance of change and continued efforts to develop the administration to enhance the team's potential. 3.4) Comparing the competency of underprivileged students at Wat Si Don Chai Municipal Community School revealed that overall, student competency increased for all grade levels. This is due to the competency-based education curriculum development and also the development of teachers to have the ability to manage competency-based learning. This increases student potential, reduces disparities, and assists underprivileged students in reaching their full potential in terms of education. These findings are similar to the ones found by Ramazan Ertürk (2022), where it was mentioned that an administration that focuses on collaboration invokes leadership qualities among the personnel and also has a positive impact on one's perception of being an inclusive part of the organization. It also results in continued expansion of teachers' abilities and overall, an administrative academic system that focuses on enhancing every student's competency via competency-based learning. Moreover, an administration that promotes collaboration and inclusivity in curriculum designing, development of learning, and being a part of the Empowerment Supervision system allows the teachers to have a sense of leadership in generating learning plans that continuously develop competency. This conforms to the results obtained by Wongsuwan and Siriwan (2017), where it was revealed that the benefits of a collaborative administration include the smooth operation of the organization and the creation of a sense of loyalty among the administration. Moreover, it also leads to an environment that invokes a sense of responsibility in carrying out and coming up with plans that result in increased organizational effectiveness. This enables the administration to gain acceptance and trust from the employees, who feel inspired and motivated to work, thereby creating a good relationship between the two parties. It also makes room for acceptance of change and continued efforts to develop the administration to enhance the team's potential.

4. The results of evaluating the satisfaction of operating based on the model revealed that the school personnel was overall very satisfied with the utilization of the model. This is because the model resulted in an increased knowledge and understanding of the theoretical principles of the model among the school personnel. The teachers were then able to see the student's progress and take pride in them as their quality of life increased due to vigorous collaboration. These findings are also reflected by Gold (2000, p.295), who revealed that community involvement serves as a mediator between parents, families, and schools to enhance literacy skills and to spread knowledge that aligns with the community's needs. It then enabled parents to gain awareness about the community, resulting in partnerships and collaborations between parents and schools to create valuable resources within the society and the school culture.

## Conclusion and suggestions

1. The administrators should be a learning opportunity that invokes a sense of togetherness and motivation to drive the academic administration to achieve tremendous success.
2. To incorporate digital technology into the academic administration, it should build an online community to provide the latest news for people and ensure that the personnel understand the organization's goals. It should provide encouragement and recognition for the accomplishments of the staff and foster ongoing learning and development.
3. Using the digital-based academic administration model to improve the quality of life and competency of underprivileged students in municipal communities involves the participation of all parties should contribute by recognizing and providing recommendations for curriculum development, teaching and learning improvement, and addressing the challenges faced by underprivileged students at every stage of the operation. This collaborative approach ensures effective and genuine management and administration.
4. Further research and development of the digital-based academic administration model include expanding its impact to other areas such as human resource management, budget control, overall management, student support system, and student development activities. This will create a suitable framework for enhancing underprivileged students' quality of life and competencies and bring long-term benefits to the school.
5. It is also recommended that the digital-based academic administration model be applied to enhance underprivileged students' quality of life and competency in other schools located in the Chiang Mai Municipal area. This will allow for improvements and adjustments to the model, making it more suitable and innovative for future educational advancements.

## New knowledge and the effects on society and communities

A digital-based academic administration to enhance the quality of life and performance of underprivileged students in urban communities. There must be a system and operating mechanism for educational institution administrators in academic administration so that personnel, parents, communities, and networks outside educational institutions can contribute to promoting the quality of life and performance of underprivileged students in urban communities. It is divided into 3 parts. including systems and mechanisms for participatory management, systems and mechanisms of empowerment, and systems and mechanisms to promote the use of digital technology.

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