Journal of Education and Educational Research
ISSN: 2957-9465 | Vol. 7, No. 2, 2024

Impact of Principals' Informatization Leadership Practices to Advancement in a China Vocational School

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Abstract: This study aims to explore teachers' evaluations of principals' information leadership and the relationship between evaluation factors. Through questionnaires and face-to-face interviews with teacher respondents, their views and opinions on principals' information-based leadership practices were collected. First, principals' information leadership practices were assessed through the International Society for Technology in Education (ISTE) Standards for Educational Leaders, including Equity and Citizenship Advocate, Visionary Planner, Empowering Leader, Systems Designer, and Connected Learning or other aspects. Secondly, statistical analysis methods were used to compare whether there were significant differences in the average scores of different teacher respondents' evaluation of principals' information leadership, and to explore the relationship between evaluation factors. The results show that there are certain differences in teachers' evaluations of principals' information leadership, with factors such as leadership style and vision, IT investment and resource allocation, IT governance practices and policies receiving focus. In addition, the study found that there is a certain correlation between teachers' evaluation of their supervisor's information leadership practices and influencing factors. Finally, based on the research results, recommendations for management development plans are put forward to further improve the school's informatization level and leadership. This study can provide useful reference for school administrators and promote the development and practice of information leadership.

Keywords: Principal Informatization; Leadership; School Development.

1. Introduction

When talking about the future of education, educational informatization is undoubtedly an indispensable aspect. With the rapid development of science and technology, informatization has penetrated into all aspects of education, from classroom teaching to school management to education policy formulation, all of which are inseparable from the support and application of informatization. In this context, the role of principals becomes even more important. They not only need to have traditional management and leadership skills, but also need to have information leadership.

In the information age, principals, leaders and schools have become an important part of carrying out information design, building information environment, developing information resources, and promoting a series of activities related to information technology. Improving the information leadership of principals has become an inevitable trend of the times. From the perspective of social development, the information-based leadership of principals is an inevitable requirement to follow the trend of the times. From the perspective of national development, strengthening principals' information-based leadership capabilities is a response to the overall call for the development of national education information-based development. Therefore, under this situation, keeping up with the pulse of the times, adapting to the trends of the times, and improving principals' information leadership capabilities are a topic of great leading significance and research value.

As the leader of the school, the principal needs to show foresight and decision-making ability in the field of information technology. They need to clarify the development direction and goals of education informatization and formulate corresponding strategic plans to lead schools to achieve informatization transformation. At the same time, principals also need to pay attention to the latest trends and technologies in educational informatization and constantly update their knowledge and skills to maintain the acumen and competitiveness of leaders.

In addition to personal abilities, principals also need to build a platform for teamwork and encourage teachers and other leaders to participate in information construction. Informatization is not just a cause for the principal alone, but a cause for all teachers and students in the school to participate in. Therefore, principals need to give teachers and other leaders sufficient power and resources so that they can play a leadership role and be innovative in the information field.

At the same time, the principal also needs to establish a learning organizational culture, promote cooperation and knowledge sharing among teachers, and promote the continuous improvement of the informatization level of the entire school. The field of information technology is developing at a rapid pace. Only by constantly learning and adapting can schools remain invincible in the wave of information technology. Therefore, the information leadership of principals is not only a current need, but also the key to future school development.

The key to promoting education informatization lies in the principal. The development of information construction requires school principals to strengthen their information leadership capabilities. This is a deep expectation for school principals' information leadership capabilities. Therefore, if a principal has a high level of information technology leadership, it means that the school has the potential to become a high-level modern school.

2. Statement of the Problem

This study determined the factors affecting principals'

informatization leadership practices in the Yichun Vocational and Technical College towards a management development program.

Specifically, it sought answers to the following questions:

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Specifically, it will seek answers to the following questions:

1.What is the profile of the respondents in terms of:

1.1Age

1.2Sex

1.3Tenure

2.What is the informatization leadership practice of the principals as assessed by the teacher respondents in terms of the following ISTE standards for educational leaders? Equity and Citizenship Advocate

2.1Visionary Planner

2.2Empowering Leader

2.3System Designer

2.4Connected Learner

3.Is there significant difference on the assessment of teacher respondents on their principals' informatization leadership in terms of the International Society for Technology in Education (ISTE) standards for educational leaders when their profile is used as test factors?

4.What is the assessment of teacher respondents on the impact of principals' informatization leadership in terms of:

4.1Leadership Style and Vision

4.2IT investment and Resource Allocation

4.3IT Governance Practices and Policies

4.4External Factors

5.Is there a significant difference on the assessment of respondents of the factors affecting their principals' informatization leadership?

6.Is there a significant relationship between respondents' assessments on their principals' information leadership practice and the factors affecting their informatization leadership?

7.What management development program can be crafted based on the findings of the study?

3. Hypotheses

H01: There is no significant difference on the assessment of teacher respondents on their principals' informatization leadership in terms of the ISTE standards for educational leaders when their profile is used as test factors.

H02: There is no significant difference on the assessment of respondents on the factors affecting their principals' informatization leadership.

H03: There is no significant relationship between respondents' assessments on their principals' information leadership practice and the factors affecting their informatization leadership.

4. Theoretical Framework

4.1. Leadership Style and Behavior Theory

The theory of leadership style and behavior traces its roots back to the 1840s, and over the years, scholars have extensively explored the intricate relationship between leaders' behavior and their overall leadership capabilities. Notably, in the late 1930s, (Lewin ,1939) contributed significantly to this field by proposing three fundamental leadership styles: authoritarian, democratic, and laissez-faire. This categorization laid the groundwork for understanding how leaders interacted with their followers and made decisions within organizational settings. Concurrently, (Pnnenb & Schmidt 1937) advanced the measurement of leadership styles by introducing a continuous dimension based on the degree of subordinates' participation in decision-making. This nuanced perspective suggested that leadership styles could be positioned along a spectrum, with authoritarian tendencies on one end and democratic inclinations on the other.

(Likert ,1967) further expanded the understanding of leadership styles by introducing four distinct categories: exploitative authoritarian leadership, benevolent authoritarian leadership, deliberative democratic leadership, and participatory democratic leadership. This classification highlighted the diverse ways in which leaders could engage with their teams, emphasizing the importance of considering both the manner in which decisions were made and the overall leadership approach adopted. One of the most comprehensive behavioral theories emerged from research conducted at Ohio State University in the 1940s. This research effort resulted in the identification of two independent dimensions of leadership behavior: prescriptive and caring. The prescriptive dimension focused on task-oriented aspects of leadership, while the caring dimension emphasized interpersonal relationships and consideration for team members.

Collectively, these historical developments underscore the evolution and success of various attempts to explain leadership from a behavioral perspective. The multifaceted nature of leadership behavior, as delineated by different theorists and researchers, has provided a rich framework for understanding how leaders influence and guide their teams. From Lewin's seminal work to Likert's nuanced categorizations and the Ohio State University's comprehensive dimensions, these contributions have significantly contributed to shaping the discourse around leadership styles and behaviors. The ongoing refinement and expansion of these theories continue to enhance our understanding of the dynamic interplay between leadership behavior and effective organizational leadership.

Within the framework of Leadership Style and Behavior Theory, the research aims to deepen the understanding of how the leadership practices of principals shape the trajectory of informatization within a vocational school in China. By focusing on different leadership styles, the study recognizes the inherent diversity in leadership approaches and how they can influence the effective integration of technology. For instance, transformational leaders may inspire innovation and forward-thinking, while transactional leaders might prioritize the efficient implementation of existing technologies. By dissecting these styles, the research seeks to pinpoint which leadership approaches prove most advantageous for navigating the intricacies of technological integration in the educational setting.

In addition to leadership styles, the study places a significant emphasis on the adaptability of principals' behaviors in response to technological changes. In a rapidly evolving digital landscape, the ability of leaders to flexibly adjust their behaviors becomes paramount. Analyzing how principals navigate this adaptability contributes valuable insights into their overall effectiveness in steering the school through the challenges and opportunities presented by informatization.

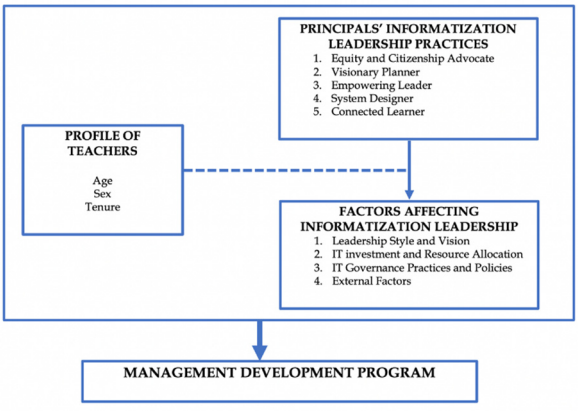
Communication and collaboration dynamics within the school community are another focal point of the research. Leadership behaviors, particularly in the realms of effective communication and collaborative engagement, play a crucial role in the successful implementation of informatization practices. By exploring how principals' behaviors influence the communication channels and collaborative spirit within the school, the research seeks to unravel the nuanced ways in which these leadership aspects contribute to or hinder the achievement of technological integration goals.

Decision-making processes represent another layer of investigation within the chosen theoretical framework. The study recognizes that leadership styles influence how principals make decisions regarding informatization initiatives. Whether decisions are made through a collaborative approach that involves various stakeholders or through a more directive style, the research aims to uncover the effectiveness of these decision-making strategies in attaining the overarching goals of technological integration.

Furthermore, the study delves into the impact of leadership behaviors on employee engagement and motivation. Effective leadership practices have the potential to create a conducive environment for the successful adoption and adaptation of new technologies. Principals who employ motivational strategies and actively engage with their staff contribute to a positive and supportive atmosphere that fosters technological innovation. Understanding the connection between leadership behaviors and the motivation and engagement levels of teachers and staff is crucial for grasping the holistic picture of how leadership influences the overall success of informatization initiatives in the vocational school context.

By adopting a Leadership Style and Behavior Theory perspective, the research aspires to offer a comprehensive and detailed exploration of how the actions and approaches of school principals impact the intricate process of implementing and integrating informatization practices within the unique context of a vocational school in China.

Table 1. Conceptual framework



The research paradigm aims to construct a comprehensive conceptual framework centered around the leadership style and behavior theory, focusing on the impact of principals' informatization leadership in schools. The initial step involves profiling school principals, examining their educational background, experience, and demographics to contextualize the study. Subsequently, the research will delve into teacher respondents' assessments of principals' informatization leadership practices. Key dimensions, including equity and citizenship advocacy, visionary planning, empowerment, system design, and connected leadership, will be scrutinized to gauge their influence on overall leadership effectiveness.

Moreover, the study will extend its focus to evaluating the impact of principals' informatization leadership on teachers. This evaluation will encompass leadership styles and visions, IT investment and resource allocation, IT governance practices and policies, and external factors affecting the leadership impact. A theoretical foundation will be established by integrating leadership styles and behavior theories, such as transformational, transactional, and servant leadership, to underpin the study's conceptual framework.

Informed by the research findings, a tailored management development program for school heads and administrators will be proposed. This program will encompass modules designed to enhance specific leadership practices identified earlier, integrating IT governance, and accounting for external factors. Implementation strategies, including mentorship programs and peer learning, will be suggested to facilitate the seamless integration of the management development program into existing professional development structures.

The expected outcomes of the management development program will be outlined, emphasizing improvements in teacher-principal relationships, enhanced IT integration, and overall school performance. The conclusion will summarize the conceptual framework's key components and highlight its potential contributions to understanding and improving informatization leadership in schools.

Lastly, recommendations for future research will be provided, including areas for further exploration such as longitudinal studies on the sustained impact of management development programs in educational settings. Through this comprehensive approach, the research aims to provide practical insights for the development of effective leadership programs tailored to the demands of informatization in educational institutions.

5. Significance of the Study

In an era characterized by rapid technological advancements, the effective integration of information technology in education is paramount. By delving into the specific challenges and opportunities faced by principals in navigating this dynamic landscape, the study not only contributes to the existing body of knowledge on educational leadership but also holds practical implications for various stakeholders. The insights gained have the potential to inform the decisions of faculty members, guide the strategies of school administrators, influence the policymaking process, and lay the groundwork for future research endeavors. As vocational education plays a pivotal role in preparing individuals for specialized careers, understanding and enhancing the informatization leadership practices in this context is crucial for fostering a technologically adept and competitive workforce. With this, the study is beneficial for the following:

Faculty Members. Understanding the factors influencing informatization leadership practices is crucial for faculty members as it directly impacts their teaching methods, communication with students, and professional development. Insights gained from the study can help faculty members adapt to new technologies, enhance their teaching effectiveness, and contribute to the overall improvement of vocational education. School Administrators. The study's findings are significant for school administrators as they provide valuable insights into the challenges and opportunities associated with informatization leadership. This

knowledge can guide administrators in formulating effective strategies, policies, and resource allocation to ensure successful integration of information technology in the vocational school's educational practices. Researcher. For researchers, this study contributes to the existing body of knowledge on informatization leadership practices in vocational education in China. The findings can serve as a foundation for future research and may offer practical recommendations for improving the quality of education through the effective use of information technology. It also provides an opportunity to identify gaps in the current understanding of the topic. Policymakers. Policymakers play a critical role in shaping the educational landscape. The study's significance for policymakers lies in its potential to inform the development and refinement of policies related to informatization leadership in vocational schools. Policymakers can use the insights gained to create guidelines, allocate resources, and establish supportive frameworks that promote the successful implementation of technology in vocational education. Future Researchers. The study provides a foundation for future researchers by offering a comprehensive understanding of the factors influencing informatization leadership practices in a vocational school setting. Future researchers can build upon this study, exploring new dimensions, testing hypotheses, and addressing emerging challenges to contribute to the ongoing development of effective informatization strategies in vocational education in China and beyond.

6. METHODOLOGY

6.1. Research Design

Statistical analysis method is a research method that reveals the development trends, interrelationships, and changes between things through quantitative analysis of their scale, degree, range, and other quantitative relationships, in order to explain and predict things.

A quantitative descriptive-comparative method will be utilized in this study to look into the factors affecting the principals' informatization leadership.

According to Babbie (2010), quantitative methods focus on independent measurements and statistical interpretation of data gathered through different kinds of surveys or working around existing numerical data with the use of mathematical technique, primarily through expound and clarify certain specific phenomena.

Given that this is descriptive in nature, it looks into links between specified variables such as constant and static data. Hence, the data gathered using structured research instruments in large number of participants produce tables and numerical charts that can be utilized to suggest a general idea about the topic at hand, or predict future results and relationships (Babbie, 2010)

6.2. Research Locale and Research Participants

This study will take place in Yichun Vocational Technical College which is located in Yichun City, a historical and cultural city in the west of Jiangxi. The city has a beautiful environment, beautiful mountains and rivers, and convenient transportation. It is a national excellent tourist city, a national sanitary city, a national garden city, and a national green model city.

Yichun Vocational Technical College is a public full-time college-level college approved by the People's Government of Jiangxi Province in June 2003 and filed by the Ministry of Education. It is a model higher vocational college in Jiangxi Province.

Yichun Vocational Technical College consists of Nursing College, Medical College, Teachers College, College of Mechanical and Electrical and New Energy Automobile, College of Finance and Accounting, College of E-Commerce and Tourism, College of Information Engineering, College of Arts and Design, College of International Education, College of Continuing Education, Innovation The Entrepreneurship Institute, the Marxist College, the Ministry of Medical Basics, the Military Sports Department and other teaching units recruit students from more than 20 provinces and cities across the country, with more than 16,000 students. At present, there are 733 full-time teachers, including 276 teachers with senior professional titles. There are 1 candidate for the "New Century Multi-Million Talent Project" in Jiangxi Province, 4 teaching teachers in provincial colleges, 1 leader in provincial middle-aged and young subjects, and provincial colleges. There are 11 young and middle-aged backbone teachers, and 2 outstanding teaching teams in provincial universities.

The study will use random sampling to choose 250 the full-time teacher respondents from 700 teachers. The 250 respondents were selected to test the questionnaire that was also validated by experts on the field. Using the Qualtrics calculator with 5% margin of error.

6.3. Research Instruments

Survey needs to be addressed face-to-face to the interviewee A research method that involves collecting responses from interviewees to understand objective facts. To understand the understanding and cognition of information technology leadership and influencing factors among school principals, the researcher used an adapted questionnaire "School administrators' Perception of their Information Technology Leadership Preparedness" by Zhong (2022) for Parts 1 and 2. Then, the researcher drafted Part 3 of the questionnaire which assesses the factors affecting the informatization leadership of principals. It will then be subjected to reliability tests and validation by experts before fielding them to the respondents.

6.4. Data Gathering Procedure

The method employed for data collection in this study was a questionnaire survey, with careful consideration given to ethical and privacy concerns. Prior to initiating the research, the researcher sought permission from Yichun Vocational and Technical College, adhering to institutional protocols. Once the necessary approvals were obtained, potential respondents were formally invited, and informed consent was acquired through signed consent forms. Respondents were provided with a detailed explanation of the research objectives and assured of the confidentiality of their responses. Additionally, they were explicitly informed of their right to refuse participation if they chose to do so. The survey instrument was administered using the online platform Questionnaire Star, allowing participants to access and complete the questionnaire at their convenience. This approach not only ensured flexibility for respondents but also emphasized the importance of their data privacy. Subsequently, the collected responses were systematically collated, forming the basis for thorough statistical analysis to derive meaningful insights into the factors influencing the informatization leadership

practices of principals in the vocational school setting at Yichun Vocational and Technical College.

6.5. Statistical Treatment of the Data

The statistical methods for processing data will mainly use the SPSS13.0 statistical software package to perform descriptive statistical analysis, analysis of variance, independent sample t-test, correlation analysis, and other calculations on the data obtained from questionnaire surveys.

Frequency Count and Percentage. Frequency counts and percentages were employed to analyze the demographic characteristics of respondents, such as the distribution of principals based on gender, years of experience, and educational background. This statistical measure provided a comprehensive snapshot of the participant profile, allowing for a nuanced understanding of how various factors influenced informatization leadership practices across different demographics. Decision-making regarding the impact of demographic factors on informatization practices was guided by patterns and trends revealed through frequency distribution. Weighted Mean. The weighted mean was utilized to determine the average scores for Likert-scale items related to specific factors affecting informatization leadership. For instance, it helped quantify the extent of agreement or disagreement among principals regarding the significance of factors like technological infrastructure, training programs, and support mechanisms. Factors with higher weighted mean scores were considered more influential, guiding the identification of key priorities in enhancing informatization leadership practices. T-test / ANOVA. T-tests and ANOVA were employed to investigate potential differences in mean scores among different groups of principals, such as those with varying years of experience or educational backgrounds. Significance levels derived from these tests were instrumental in determining whether specific groups exhibited statistically significant variations in their perceptions of informatization leadership practices, informing targeted interventions. Scheffe and Least Significant Difference (LSD). Post-hoc tests, including Scheffe and LSD, were applied following ANOVA to identify specific group differences. For instance, these tests helped discern whether principals from distinct departments or with different levels of experience had significantly differing views on the impact of professional development programs on informatization leadership. Identification of significant group differences guided a more nuanced understanding of how certain factors influenced informatization practices among specific subsets of principals. Pearson's Correlation Analysis. Pearson's correlation analysis was employed to explore relationships between variables, such as the correlation between the level of technological infrastructure and the effectiveness of informatization leadership practices. Significance levels associated with correlation coefficients were used to determine the strength and direction of relationships, contributing to a more comprehensive understanding of the interconnected nature of various factors influencing informatization leadership.

Decision Criteria. Decisions were based on predetermined significance levels (e.g., $p < 0.05$). If the p-value fell below the threshold, the null hypothesis was rejected, indicating statistically significant findings. This systematic approach ensured the robustness of the study's conclusions, providing valuable insights into the factors influencing informatization leadership practices in the specific context of a vocational school in China.

7. Results and Analysis

7.1. As a Visionary Planner, The Principal has the Following Characteristics:

1. Strategic thinking: A visionary principal can assess the situation and gain insight into industry and technology development trends, as well as the impact of social changes. They can think about the development of the school from a long-term perspective and formulate information strategies for sustainable development.

2. Innovation ability: Visionary principals have the courage to break through traditional constraints and try new educational technologies and methods. They can push schools to actively explore innovative information solutions to adapt to the ever-changing educational environment.

3. Goal-oriented: A visionary principal can clearly set goals and milestones for informatization development and formulate clear roadmaps and plans. They can combine the school's vision with the information strategy to provide a clear development direction for teachers and students throughout the school.

4. Keen insight: A far-sighted principal can accurately identify opportunities and challenges in the development of school information technology, and adjust plans and strategies in a timely manner. They can flexibly respond to changes in the external environment and maintain keen insight and adaptability.

Teamwork: A visionary principal understands the importance of teamwork and can work closely with teachers, students and other stakeholders to jointly formulate and implement information development plans. They can stimulate the participation and innovation of team members and jointly promote the realization of school information development.

7.2. Principal Empowers Leaders

Characteristics of a principal that empower leaders include:

1. Trust and empowerment: The principal trusts and empowers teachers and other school leaders with decision-making and action authority. They believe that these leaders have sufficient ability and responsibility to make positive contributions to the information development of the school.

2. Resource support: The principal provides necessary resource support to teachers and other school leaders, including technical equipment, training opportunities, funding, etc. They ensure that leaders can carry out their work smoothly and achieve information goals.

3. Encourage innovation and initiative: The principal encourages leaders to show innovation and initiative in the field of information technology, and advocates the courage to try new methods and tools, the courage to face challenges, and to bring new ideas and results to the school.

4. Support risk and failure: Principals support leaders in taking risks in information work and understand that failure is part of the innovation process. They encourage leaders to try things, learn from failures, and prepare for future improvements.

5. Communication and cooperation: The principal maintains good communication and cooperation with leaders and encourages them to participate in the information planning and decision-making process. They value the opinions and suggestions of leaders and discuss with them the direction and strategies of school information development.

6. Incentive and recognition: The principal motivates and

recognizes leaders who have performed well in the field of information technology, and encourages them to continue their efforts and make greater contributions to the development of the school. They link the achievements of leaders to the success of the school as a whole, emphasizing the importance of teamwork.

These characteristics enable principals to effectively empower leaders and promote greater achievements in school information development through their efforts and contributions.

7.3. Principal as System Designer

Characteristics of a principal as a system designer include:

1. Technical understanding and professional knowledge: The principal has the understanding and professional knowledge of information technology systems, can understand the structure and operating principles of the school's information system, and has certain technical background or professional training.

2. System planning and management capabilities: The principal has system planning and management capabilities and can design and maintain an effective information system. They can analyze the school's information needs, formulate corresponding plans and strategies, and effectively manage the allocation and use of information technology resources.

3. Security and stability awareness: The principal attaches great importance to the security and stability of the information system and can ensure the security and stability of the school information system. They take appropriate security measures to protect against cyberattacks and data leakage risks, and ensure system stability and reliability.

4. Continuous optimization and improvement: The principal can continuously optimize and improve the information system according to the needs of the school. They continuously collect feedback and data, analyze the operation of the system, and promptly adjust and optimize system configuration and functions to meet the changing needs of teaching and management.

5. Resource integration and coordination capabilities: The principal has the ability to integrate and coordinate resources, and can effectively integrate resources inside and outside the school, including human resources, technical resources, financial resources, etc., to support the construction and operation of information systems.

6. Forward-looking and innovative consciousness: The principal is forward-looking and innovative, able to pay attention to the latest development trends of information technology, explore new technology applications and solutions, and apply them to the school's information system to promote school informatization. The level continues to improve.

These characteristics enable the principal to act as a system designer, effectively design and manage the school's information system, and promote the school's information development to achieve greater achievements.

7.4. Principals as Connected Learners

As a connected learner, principals have the following characteristics:

1. Continuous learning and updating of knowledge: Principals have the awareness of continuous learning and constantly update their knowledge and skills in the field of information technology. They actively participate in trainings, seminars, professional conferences and other activities, pay attention to the latest educational technology development trends, and are able to apply these knowledge and skills to the actual management and teaching of schools.

2. Encourage independent learning and exploration: The principal encourages teachers and students to engage in independent learning and technological exploration, and provides corresponding support and resources. They establish an atmosphere that encourages innovation and exploration, give teachers and students enough freedom and confidence, and encourage them to try new teaching methods and technological tools.

3. Promote cooperation and knowledge sharing: The principal establishes a learning organizational culture to promote cooperation and knowledge sharing among teachers. They encourage experience exchange and resource sharing among teachers, and organize and support teachers to participate in learning communities and professional development activities to improve the informatization level of the entire school.

4. Promote overall development and innovation: The principal promotes the continuous development and improvement of the entire school in the field of information technology by establishing a learning organizational culture and providing corresponding support and resources. They pay attention to the continuous improvement and innovation of school information work and can flexibly adjust and optimize the information system to meet the changing needs of teaching and management.

5. Act as role models and leaders: As connected learners, principals act as role models and leaders for learning. They lead by example, actively participate in learning activities, demonstrate their attitude and spirit of learning, encourage others to join the ranks of learning, and promote the establishment of a learning cultural atmosphere throughout the school.

These characteristics enable principals to become the leaders and promoters of school information development and promote the school's continuous progress and innovation in the field of information technology.

7.5. Principal's Leadership Style and Vision

Characteristics of a principal's leadership style and vision can include the following:

1.Vision and mission orientation: The principal has a clear educational vision and mission and can set clear goals and directions for the future development of the school. They inspire empathy among teachers and students and guide the entire school team toward a common goal.

2.Encourage innovation and change: The principal encourages teachers and students to try new teaching methods and technological tools, and promotes a spirit of innovation and a sense of change. They support teachers and students to have the courage to try, encourage them to explore new possibilities in the field of education, and continuously innovate and improve.

3.Participative leadership: The principal adopts a participatory leadership style, establishes equal and open communication channels with teachers and students, listens to their opinions and suggestions, and discusses with them the school's development direction and strategies. They encourage teamwork and shared decision-making for the betterment of the school as a whole.

4. Empowerment and Trust: The principal gives teachers and students full power and responsibility, trusting them to be

competent at their jobs and to make positive contributions to the development of the school. They support and encourage team members to realize their potential and actively participate in the school's decision-making and practical activities.

5. Goal-oriented and result-oriented: The principal focuses on achieving the goals set by the school and achieving expected results, and can formulate corresponding strategies and plans to effectively organize and manage the school's work. They focus on performance evaluation and continuous improvement to ensure that the school's development can continue to move towards the set goals.

6. Motivation and Support: The principal can motivate and support teachers and students, encouraging them to fully realize their potential and achieve common personal and school goals. They pay attention to the growth and development of team members, provide corresponding training and support, and help them overcome difficulties and achieve self-transcendence.

These characteristics enable principals to lead the school forward with a positive leadership style and clear vision, promote educational innovation and change, and make positive contributions to the overall development of students and social progress.

7.6. The Principal's Characteristics in Terms of IT Investment and Resource Allocation Include:

1.Strategic Planning: The principal has the ability to formulate long-term strategic planning for IT investment and resource allocation. They not only consider current needs, but also predict future development trends to ensure that investment and allocation can support the school's information development goals in the long term.

2.Reasonable allocation of resources: The principal can reasonably allocate IT resources according to the school's information needs and priorities. They will comprehensively consider the needs of all aspects, including hardware equipment, software applications, network infrastructure, technical support, etc., to ensure that resource allocation meets the needs of the overall development of the school.

3.Fund Raising and Management: The principal has the ability to raise funds and manage budgets. They will actively seek government funds, project funding or other sources of funds to support the school's information construction, and can effectively manage these funds to ensure that the use of funds meets the expected goals and benefits.

4.Technology first: The principal regards technology as an important support for the development of the school and pays attention to the update and upgrade of IT equipment and systems. They will continue to pay attention to the development of new technologies and actively invest resources to ensure that the school's information technology facilities remain advanced and efficient.

5.Education and Training: The principal attaches great importance to the cultivation and development of IT talents and invests resources in the training and improvement of teachers and staff. They will organize various forms of training activities to improve the IT skills and application capabilities of teachers and staff to meet the needs of information-based education.

6.Supervision and Evaluation: The principal will establish an effective supervision and evaluation mechanism to supervise and evaluate the use of IT investment and resource allocation. They pay attention to the efficiency and effectiveness of resource use, adjust and optimize resource allocation plans in a timely manner, and ensure maximum utilization of resources.

These characteristics enable principals to effectively manage the school's IT investment and resource allocation, promote the development of information-based education, and provide better educational services to students.

7.7. Characteristics of Principals' IT Governance Practices and Policies Include:

1.Develop policies and norms: The principal can formulate and promote the implementation of policies and norms related to IT governance. These policies and specifications cover the rational use of IT resources, information security management, data privacy protection, etc., to ensure the standardization and effective implementation of school information work.

2.Establish a governance mechanism: The principal has established a sound IT governance mechanism, including an IT committee or related working organization, which is responsible for formulating and supervising the implementation of IT governance strategies. They promote the alignment and coordination of IT governance with the school's overall development goals by establishing cross-departmental collaboration mechanisms.

3.Risk Management and Compliance: The principal pays attention to IT risk management and compliance, pays attention to risks in information security and data privacy, and takes corresponding measures to manage and control. They ensure that the school's IT activities comply with relevant laws, regulations and standards and avoid possible legal risks and losses.

4. Supervision and Evaluation: The principal supervises and evaluates IT governance practices to ensure the effectiveness and applicability of governance measures. They establish a performance evaluation mechanism, regularly evaluate and provide feedback on IT governance work, adjust and optimize governance strategies in a timely manner, and improve governance levels and effects.

5. Promote innovation and development: The principal encourages innovation and development and promotes the integration of IT governance and school information development. They support teachers and students in trying new teaching methods and technical tools, encourage team members to participate in IT governance, and jointly promote the school's informatization process.

6.Cross-departmental cooperation: The principal promotes cross-departmental cooperation to ensure comprehensive and systematic IT governance. They work closely with various departments in the school to jointly formulate and implement IT governance strategies and give full play to the role and contribution of each department in information work.

In summary, the principal has a leadership role in IT governance practices and policies by formulating policies and norms, establishing governance mechanisms, focusing on risk management and compliance, conducting supervision and evaluation, promoting innovation and development, and cross-departmental cooperation, to promote the school's informatization work to be carried out in a standardized and efficient manner.

8. Conclusion

Principals play an important role in the field of information technology, and their leadership style and decision-making have a significant impact on IT investment and resource allocation, IT governance practices and policies. The principal should have a clear vision and mission, encourage innovation and change, promote teamwork, rationally allocate resources and establish an effective IT governance mechanism. At the same time, principals should also pay attention to risk management and compliance, actively promote the integration of technology and education, and promote the continuous improvement of school informatization levels. Taken together, the principal's active leadership and effective management are key factors in ensuring the smooth development and results of school informatization work.

9. Recommendations

1. Develop a clear information vision and strategic plan: The principal should work with the school team to formulate a clear information vision and strategic plan to ensure that the information work is consistent with the school's overall development goals and can lead the school in the future development direction.

2. Strengthen resource investment and allocation: Principals should rationally allocate IT resources, including funds, technical equipment, human resources, etc., to ensure the smooth development of school information work. At the same time, it is encouraged to seek external financial support, such as government funding or sponsorship, to increase funding sources for informatization construction.

3. Establish a sound IT governance mechanism: The principal should establish a sound IT governance mechanism, clarify the IT decision-making process and responsibilities, and ensure the effective management and operation of information work. In addition, risk management and compliance supervision will be strengthened to ensure the safe and stable operation of information systems.

4. Promote the improvement of information technology capabilities of teachers and students: Principals should encourage teachers and students to participate in information technology training and learning to improve their information technology capabilities and application levels. By organizing relevant training and activities, we can stimulate the interest of teachers and students and promote the application of information technology in teaching and learning.

5. Establish a learning organizational culture: Principals should advocate the establishment of a learning organizational culture and encourage teachers and students to continue learning and innovating in the field of information technology. By sharing experience and knowledge, we promote cooperation and exchanges between teachers and jointly promote the continuous improvement of the school's informatization level.

6. Continue to pay attention to technological development trends: Principals should maintain attention to the development trends of information technology and keep abreast of new technologies and solutions to cope with the ever-changing information challenges. Through cooperation with industry experts and relevant institutions, we jointly discuss the latest developments in informatization and provide more targeted support and guidance for school informatization work.

Based on the above suggestions, principals can develop a clear vision and strategic plan, strengthen resource investment and allocation, establish a sound IT governance mechanism, promote the improvement of teachers and students' information capabilities, establish a learning organizational culture, and continue to pay attention to technology development trends. and other methods to comprehensively promote school informatization work and achieve the goals of educational modernization and comprehensive development.

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