Research on multiple leadership effectiveness from the perspective of technological change education

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Abstract: Multi-leadership is an important development trend of group leadership model. China is in a critical period of comprehensively deepening reform and comprehensively realizing the development of a well-off society. In this context, to learn from the research status of educational leadership at home and abroad, it is necessary to establish a scientific evaluation system, leadership training system and linkage development mechanism for higher vocational education, and actively carry out localized educational leadership research. We should improve the principals' informatization leadership from the aspects of establishing a shared informatization vision, supporting teachers' professional development, improving principals' personal information literacy, improving team information literacy, taking the initiative to change, seeking external support and paying attention to communication, so as to realize the informatization vision of the school. Thus, it clarifies and enriches the achievements that multiple leadership affects leadership effectiveness, and also provides guidance for enterprises to successfully implement multiple leadership according to their own situation.

Keywords: Technical reform education; Diversified leadership; Leadership Effectiveness

1. Introduction

With the development of modern new technology and network technology, human beings have gradually entered the information society \cite{1}. The slowdown of economic growth, the pain of structural adjustment, and the digestion of early-stage policies are the great dilemmas facing the Chinese economy. The traditional extensive economic growth mode and partial adjustment cannot meet the needs of sustainable development, and the Internet can improve productivity and innovation, and other aspects to provide new momentum for GDP growth \cite{2}. However, with the rapid change of the environment and the gradual shortening of the life cycle of products and business models, the traditional vertical leadership model based on superior subordinate relationship can no longer meet the needs of enterprise survival and development. Enterprises urgently need to help them adapt to the dynamic and changeable environment through the group leadership model with the participation of all members \cite{3}. The ten-year development plan for educational informatization (2011-2020) recently released by the Ministry of education clearly mentions the concept of "school educational informatization leadership" in the framework of the development level of basic education informatization in 2020, and proposes to improve educational informatization leadership \cite{4}.

According to the personal practical research experience, the pen researcher takes the research as the research, and the principal changes the research, leads the research, guides the research, and improves the research. One of the research keys is to grasp the research personnel, research resources, research elements, improve the research personnel, research resources, research integration and research allocation \cite{5}. At the 11th meeting of the Central Financial and Economic Leading Group in 2015, General Secretary Xi Jinping proposed for the first time that supply-side reforms should be used to promote industrial transformation and enterprise efficiency: "Efforts should be made to strengthen supply-side structural reforms, improve the quality and efficiency of the supply system, and enhance economic sustainability. The growth trend will promote the overall jump in the level of social production in my country." In addition, Deloitte released the latest report "11 Predictions for Human Resource Trends in 2017: Towards Digitalization". The school implements the principal responsibility system, and the principal's informatization leadership plays a decisive role in promoting the development of school informatization \cite{6}. Diversified leadership is a group leadership model that emphasizes the sharing and rotation of leadership functions and responsibilities among members of an organization or group. Different members replace leadership roles and practices during the interaction.
of formal and informal leadership relationships, thereby improving the ability of enterprises to deal with complex environments [7].

2. Research purpose and significance

2.1 Research purposes

At present, there are still some problems in the research on the effectiveness of multiple leadership. For example, the research conclusions on the impact of multiple leadership on leadership effectiveness are still different, and different research conclusions are limited by specific research design and lack universality [8]. So, what kind of "new leadership" should enterprise leaders take to effectively adapt to the above new situation and deal with the transformation dilemma? Firstly, environmental dynamics refers to the severity of the real-time pursuit of change and innovation in the context of the Internet. Secondly, operational interconnection refers to the extent to which important management activities (such as communication, honor determination and technology development) of enterprises are affected by interconnection in the process of transformation. Based on the digital transformation context, the influencing factors composed of environmental dynamics, operational interconnectivity and task collaboration are constructed, and the influence and boundary conditions of specific contexts on change leadership are expounded. The research group of "Science and Technology Leadership Research" of the Chinese Academy of Sciences has defined leadership: Leadership is the ability of a leader to attract and influence the leader and stakeholders in a specific situation and continue to achieve group or organizational goals [9]. Explore the development of vocational education at the undergraduate level.

In the school reform, the principal should solidify the excellent tradition with the system, so that it can be passed on; For "bad habits", such as muddle along mental state, closed narrow vision, etc., principals should strive to reform [10]. The principal should be good at making use of external resources to reform the "bad habits" of the school. Therefore, individuals, teams and even organizations in Zhuo Yi may not be able to effectively and quickly deal with the information that is vital to the development of enterprises under the Internet situation only by being white.

2.2 The significance of research

Research Significance With the gradual accumulation of empirical research on the effectiveness of multiple leadership, the relevant theoretical system is also becoming more and more perfect. For example, business leaders used to establish contacts with employees through organizational design or institutional arrangements, but in the context of the Internet that emphasizes openness, equality and interaction, business leaders have more possibilities for direct interaction with employees in the organization, and at the same time need to pay attention to the diverse individual needs of employees. Based on the research paradigm of problem driven and scenario embedding, the core research problem is defined as: in the context of digital transformation, what kind of situational leadership does the enterprise need to adopt to ensure the synergy between the original stock business and the increment of digital technology, and finally realize the successful transformation of the enterprise. The school implements the principal responsibility system, and the principal's informatization leadership plays a decisive role in promoting the development of school informatization. Establish a professional degree postgraduate training mode guided by professional needs, focusing on the cultivation of practical ability and the combination of production and learning. There are plans to invite provincial and municipal famous teacher studio teams to the school to carry out a series of educational theme seminars; For weak subjects, please ask retired senior teaching and research staff to carry out long-term teaching diagnosis and guidance. However, by reviewing and combing the literature, it is found that there are still different views on the leadership effectiveness caused by multi-leadership. Therefore, the leader's task begins to turn to organizational innovation and ecological cooperation based on the external environment. In this paper, the meta-analysis method is chosen to analyze the relationship between multi-leadership and leadership effectiveness, which helps to clarify the reasons for the divergent conclusions in the past studies.
3. Establish an information management team to stimulate the sense of responsibility of team members

3.1 Adapt to the information environment and take the initiative to change

Educational informatization brings opportunities to schools, but also brings a lot of instability and uncertainty. The main effect hypothesis includes the relationship between multiple leadership and overall leadership efficacy, the relationship between multiple leadership and different efficacy indicators, and the relationship between different types of multiple leadership and different efficacy indicators. The contextual category of change research mainly focuses on the forces of change inside and outside the organization but in the environment that have a significant impact on organizational effectiveness. Scholars try to explain why internal and external contexts are part of organizational change by investigating different contexts of change. The headmaster is facing a changing leadership background. How to deal with the challenge of change while maintaining the teaching order is the first consideration of leaders. In his book, Professor Fulan puts forward that school leaders should highlight their moral mission in the face of the changing internal and external environment. Principals should strive for opportunities for teachers to participate in various high-level training, especially seize the opportunity of the current new round of curriculum reform to promote the improvement of teachers' professional quality; Organize the cadre team to visit and study in famous schools inside and outside the province, and even study and exchange with the post. Conversely, in the face of the tide of education informatization, if the principal does not know how to change, the development of school informatization will be slow or even stagnant, thus hindering the development and reform of the school.

The influence of leadership on the success of organizational change is the most important, followed by company value, organizational communication and education and training (see Table 1).

| Essential factor                  | Proportion considered important (%) |
|-----------------------------------|-------------------------------------|
| Leadership                        | 95                                  |
| Common values                     | 83                                  |
| Organizational communication      | 74                                  |
| Team building                     | 61                                  |
| Education and training            | 69                                  |

3.2 Seek external support and strengthen cooperation

As an organization, the school is open. The moderating effect hypothesis includes the moderating effects of situational factors (team type, average tenure of the team, and cultural differences) and method factors (leadership measurement methods and data attributes) on the relationship between the two. A total of 8 hypotheses are constructed on the basis of this hypothesis. Conceptual model for this article. This moral mission is, of course, student-centered, and it is centered on all students, not only outstanding students, but also those who are lagging behind. Whether "bringing in" or "going out", they are using external forces to open up the situation of school reform, make teachers aware of their own problems, push them out of the dilemma of "bad habits", and stimulate their vitality for reform. In the transformation stage, the organization needs to change from the old operation mode to the new operation mode through structural adjustment and flow volume reengineering. Many researchers believe that leadership is a formal and informal relationship network naturally generated in the interaction process of organizational members. Members in the network achieve team or organizational goals through leadership sharing and interaction. In addition, the school's strategic planning, school running philosophy and school running methods should be often communicated with the government, communities and parents, so as to obtain understanding and support from all aspects and support various educational informatization reform measures of the school. At the same time, we will continue to summarize own successful experiences and practices, and continue to further promote the progress of regional education and educational leadership. Moreover, without the support of the government and the community, the school's informatization vision will be difficult to achieve. Data attributes will adjust the relationship between multiple leadership and leadership effectiveness, that is, compared with cross-sectional data design, the multiple leadership measured by longitudinal data design has a more significant positive relationship with leadership effectiveness. The theoretical model is shown in Figure 1.
4. Conclusions

At present, the development of higher vocational education is rapid, and the state provides full support from policies, systems, manpower, funds and other aspects, and strives to build a modern vocational education system. Therefore, companies need to adopt contextualized change leadership. How to promote the application of information technology in the education process, as the principal of the school, the information leadership of the principal plays a decisive role. Under this background, it is of great significance to explore the leadership construction of higher vocational education with Chinese characteristics for improving the quality and connotation of higher vocational education. Only by stimulating the vitality of teachers and tapping their internal potential, can we inject the power of sustainable development into the reform of schools. In addition, the above effects are negatively regulated by the innovative culture, that is, the lower the innovative culture, the more change leadership is needed to deal with the Internet situation. Therefore, we must consider how to improve the headmaster's information-based leadership and how to make the information-based leadership more effective. The establishment of scientific and standardized evaluation, training, linkage and localized leadership research mechanism in higher vocational education will lay a solid foundation for long-term and high-quality development.

References

[1] Mi Jing, Li Houde. From technology orientation to engineering orientation: an analysis of French secondary education reform since the middle of the 20th century [J] Research on Vocational and technical education in China, 2021 (22): 9
[2] Wang xuenan, Yang Yingdong. Research on the action mechanism and future thinking of technological power and educational reform [J] Chinese Journal of education, 2021 (11): 7
[3] Wang Linyan, Wu Yu. Research on English teaching reform and micro class teaching mode under modern educational technology -- Comment on "exploration of College English information teaching reform and micro class teaching mode" [J] Research on foreign language audio-visual teaching, research 2021 (1): 1
[4] Liu Wenwu. Research on promoting the reform of Wushu education system with the reform of Wushu Professional and technical education [J] Study sports science, 2020
[5] Zhang Yi, Zhang Qianwei. Research on the frontier of technology promoting educational reform: a
review of edusummit international summit [J] Research on audio visual education, 2021
[6] Xu Yihan. Research on the important role of modern educational technology in promoting the teaching reform of colleges and Universities -- Comment on Educational Technology: a breakthrough in the teaching reform of modern higher education [J] Research on Chinese scientific papers, research 2020, research 15 (3): 1
[7] Gu Xiaojie, Li Yanping. Research on the new progress of the reform of the qualification framework system in the UK -- Based on the review of the technical education reform after the age of 16 - T-level action plan [J] Research on China’s Vocational and technical education, research 2020 (9): 8
[8] Wang Xiaojing. Research on English teaching reform and micro class teaching mode under modern educational technology -- Comment on College English information teaching reform and micro class teaching mode [J] Chinese Journal of education, 2021 (12): 1
[9] Yang Junfeng, Zhushi gaojun, Zhuzhuang Rongxia, et al. Research on 5g + Intelligent Education: Research on educational reform based on Intelligent Technology [J] Research on audio visual education in China, 2021 (4): 7
[10] Chen Lin, Chen Yaohua. Research on the Chinese experience of technological change education since the reform and opening up [J] Research on audio visual education in China, 2020 (4): 9