IMPROVING CRITICAL THINKING ABILITY FOR HIGH SCHOOL ADMINISTRATORS - A CASE STUDY IN THE MEKONG DELTA, VIETNAM

MELHORANDO A CAPACIDADE DE PENSAMENTO CRÍTICO PARA ADMINISTRADORES DE ESCOLAS DE ENSINO MÉDIO - UM ESTUDO DE CASO NO DELTA DO MEKONG, VIETNÃ

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Abstract. This study assesses the current state of critical thinking among high school administrators in the Mekong Delta, Vietnam, and proposes solutions to improve this capacity. Through a mixed research method of survey, interview, and document analysis, the study identifies key constraints and influencing factors, such as training programs, support resources, and school culture. Proposed solutions include organizing specialized training courses, developing specific training programs, and creating a school environment that encourages critical thinking. The study not only improves critical thinking capacity but also contributes to improving the quality of education in the Mekong Delta, Vietnam today. Results show that Implementing intensive training strategies that combine theory, and practice will play an important role in improving critical thinking skills. Managers need to be provided with opportunities to practice critical thinking through simulated or real-life situations where they can apply their knowledge and analytical skills to solve specific situations. In addition, monitoring and evaluating the effectiveness of practice will help to adjust and improve managers' critical thinking skills. When critical thinking skills are improved, not only will the personal capacity of managers be improved, but it will also contribute significantly to improving the quality of educational management. This will lead to innovation in school management methods, helping to increase transparency, efficiency and create a more favorable educational environment for students.

Keywords: Competency, critical thinking, teacher, Mekong Delta, Vietnam

Resumo. Este estudo avalia o estado atual do pensamento crítico entre administradores de escolas de ensino médio no Delta do Mekong, Vietnã, e propõe soluções para melhorar essa capacidade. Por meio de um método de pesquisa misto de pesquisa, entrevista e análise de documentos, o estudo identifica as principais restrições e fatores de influência, como programas de treinamento, recursos de suporte e cultura escolar. As soluções propostas incluem a organização de cursos de treinamento especializados, o desenvolvimento de programas de treinamento específicos e a criação de um ambiente escolar que incentive o pensamento crítico. O estudo não apenas melhora a capacidade de pensamento crítico, mas também contribui para melhorar a qualidade da educação no Delta do Mekong, Vietnã hoje. Os resultados mostram que a implementação de estratégias de treinamento intensivo que combinam teoria e prática desempenhará um papel importante na melhoria das habilidades de

pensamento crítico. Os gerentes precisam ter oportunidades de praticar o pensamento crítico por meio de situações simuladas ou da vida real, nas quais podem aplicar seus conhecimentos e habilidades analíticas para resolver situações específicas. Além disso, monitorar e avaliar a eficácia da prática ajudará a ajustar e melhorar as habilidades de pensamento crítico dos gerentes. Quando as habilidades de pensamento crítico são aprimoradas, não apenas a capacidade pessoal dos gerentes será aprimorada, mas também contribuirá significativamente para melhorar a qualidade da gestão educacional. Isso levará à inovação nos métodos de gestão escolar, ajudando a aumentar a transparência, a eficiência e a criar um ambiente educacional mais favorável para os alunos.

Palavras-chave: Competência, pensamento crítico, professor, Delta do Mekong, Vietname

1. INTRODUCTION

The 21st century, with the industrial revolution 4.0, has created a major turning point in many fields, especially education, which is strongly influenced by digital technology, artificial intelligence and big data. These changes not only bring opportunities but also pose huge challenges, especially for the management team, who play a key role in educational innovation and training high-quality human resources. In Vietnam, the need for educational innovation is becoming increasingly urgent to improve people's knowledge, train human resources and foster talents, meeting global educational standards. In this context, critical thinking is considered a core skill, helping managers adapt to rapid changes and improve management and teaching effectiveness, thereby comprehensively improving the quality of education.

However, a survey of high schools in the Mekong Delta region shows that the critical thinking ability of educational managers is still limited. Skills such as analysis, evaluation, and critique have not been fully developed, and the management and teaching processes remain one-sided, lacking scientific critique. This hinders work effectiveness and innovation, requiring specific and appropriate solutions to enhance critical thinking capacity.

Although many studies have focused on developing critical thinking, most have targeted students or provided general theoretical frameworks. In-depth research specifically aimed at secondary school managers, especially in contexts such as the Mekong Delta region in Vietnam, remains limited. This gap needs to be addressed to provide both scientific and practical foundations for developing critical thinking skills, contributing to the improvement of management and education quality in the local area.

Developing critical thinking not only enhances the professional competence of managers but also fosters a dynamic, democratic, and creative educational environment. In this environment, secondary school managers are encouraged to cultivate independent, creative, and critical thinking - essential skills for adapting to the challenges of the modern era, which are of pressing significance.

2. RESEARCH METHODS

2.1. Theoretical research methods

The methods of analysis, comparison, synthesis, classification, and systematization of theoretical documents both domestically and internationally related to enhancing the critical thinking capacity of secondary school managers - a case study in the Mekong Delta, Vietnam – have been applied to establish the theoretical foundation for the study. At the same time, these methods also guide the design of the survey tool to assess the current state of enhancing the critical thinking capacity of secondary school managers - a case study in the Mekong Delta, Vietnam.

Sources of documents include: Directives, Resolutions, policies of the Communist Party of Vietnam and the State of Vietnam, along with Circulars, official dispatches and guidance documents from Central Ministries and branches. In addition, there are provincial and district plans, as well as guidance documents from Departments and local agencies. Scientific works

related to the research content of the project, including dictionaries, monographs, scientific journals and other reference materials.

2.2. Practical research method

The survey method using a questionnaire: A questionnaire will be developed for 650 secondary school managers in the Mekong Delta region to collect the necessary information for analyzing and evaluating the current state of the research issue.

Question rating scale: The scales include 5 levels from 1 to 5. The value between the levels is (5-1)/5 = 0.8 (From 1-1.8: Not implemented/No results; From 1.81-2.6: Little implemented/Weak; From 2.61-3.40: Moderate/Average; From 3.41-4.2: Implemented quite a lot/Fair; From 4.21-5.0: Regularly implemented/Good, with the following convention:

Table 1. Question rating scale

Level of results		**Point**	**Average score**
Level 1	Weak	1	1.0–1.8
Level 2	Average	2	1.81–2.60
Level 3	Fair	3	2.61–3.40
Level 4	Good	4	3.41–4.20
Level 5	Very good	5	4.21–5.0

Expert method: Meet and engage directly with experts in both theoretical and practical research on the topic, seeking their opinions on the urgency and feasibility of measures to enhance the critical thinking capacity of secondary school managers – a case study in the Mekong Delta region, as proposed in the article. Additionally, expert opinions will be consulted throughout the process of developing and implementing the research.

Interview method: Conduct interviews and discussions with a number of managers in the Mekong Delta region. The survey will use an interview questionnaire to clarify the results obtained from the survey forms and supplement the necessary information for the research topic.

Mathematical statistics method: The survey data will be processed using software such as Stata, SPSS, and MS Excel, focusing on quantitative information to identify key objective parameters.

Ensuring reliability and objectivity: Randomly select from the list of managers provided by the Departments of Education and Training in the Mekong Delta region, ensuring regional and school-level representation.

Reliability testing: Quantitative, Cronbach's Alpha test to assess the reliability of the questionnaire. Qualitative, ensuring that the interviews are conducted independently, without influencing the answers.

3. THEORETICAL FRAMEWORK

3.1. Thinking

Thinking is the cognitive process that reflects objective reality in the human brain, showcasing creativity in exploring and transforming the world (Vietnamese Encyclopedia, 2005). From the perspective of dialectical materialism, thinking is dynamic, continuously evolving, and closely intertwined with practice, history, and society (Marx & Engels, 1978). Cognitively, thinking allows individuals to analyze, separate, and understand the nature of phenomena, thus enabling the development of deeper and more accurate knowledge.

3.2. Critical Thinking

Critical thinking, originating from ancient Greek philosophy, emphasizes the ability to analyze and evaluate information based on logical and evidential criteria. Richard Paul and Linda Elder (2006) define it as "the art of analyzing and evaluating thinking with the aim of improving it." This definition underscores that critical thinking is not only about analysis but also about enhancing the quality of thinking by adjusting its logical structure.
John Dewey (1933) highlighted that critical thinking involves the active, continuous, and deliberate examination of beliefs or assumptions, taking into account rational arguments and conclusions. This approach enables individuals to not only absorb information but also assess it objectively and from multiple perspectives.

3.3. Distinguishing between critical thinking, criticism and fallacy

Critical thinking is different from criticism and fallacy. Criticism is often negative, unfounded criticism, while fallacy is illogical reasoning, leading to erroneous conclusions (World Vision Vietnam, 2010). Critical thinking focuses on evaluating information objectively and scientifically.
In short, critical thinking is a systematic and creative thinking skill that helps analyze and evaluate information based on evidence and logical reasoning. This is an important factor that contributes to improving the quality of cognition and the ability to apply knowledge into practice.

3.4. Critical thinking ability

Ability is a synthesis of qualities, knowledge and skills that help people perform an activity effectively (Vietnamese Encyclopedia). This is not innate but is the result of learning and training. Thinking ability is the ability to apply knowledge to create appropriate solutions, guided by a system of concepts and categories of thinking, especially under the influence of philosophy.
In the modern context, thinking ability requires renewing old knowledge and integrating new knowledge to accurately reflect complex problems. Critical thinking, as an important branch, helps eliminate bias, approach rationality and improve decision quality.
Critical thinking ability is the ability to analyze, evaluate and process information in a reasonable way. It combines knowledge, skills and attitudes to verify the accuracy of information and build new knowledge to meet practical needs. The process of developing this ability includes: Receiving information: Carefully analyzing the content, nature and context. Processing information: Based on logic and scientific basis, asking the question "why". Detecting problems: Identifying new problems, finding suitable solutions. Applying thinking: Using content and thinking methods proficiently to solve problems effectively.
These factors are closely linked, promoting the comprehensive development of critical thinking capacity. Critical thinking capacity not only supports individuals in making correct decisions but is also an important foundation for the sustainable development of communities and society in times of change.

3.5. Content and essence of improving critical thinking capacity for managers and teachers

Improving the critical thinking capacity of secondary school administrators is an urgent requirement in building a team with sharp, independent and creative thinking. To achieve this goal, it is necessary to focus on the following contents:
Improving the capacity to receive information: Receiving information is the first and decisive step in the critical thinking process of administrators. It is necessary to accumulate knowledge from many fields and specialize in political theory, apply Marxism-Leninism, Ho Chi Minh thought and the guidelines of the Communist Party of Vietnam and the State of Vietnam into

practice. Receiving information from many different sources (textbooks, lecturers, the Internet) requires the ability to filter, analyze and evaluate accurately. Therefore, it is necessary to improve the ability to be proactive, respond and connect information scientifically, ensuring accuracy and quality.

Improving Information Processing Capacity: Effective information processing is a critical step in enhancing critical thinking. High school administrators must be able to organize and classify information based on its reliability and relevance. This ability allows for the accurate identification of problems and the formulation of sound judgments and assessments. Efficient information processing not only saves time but also improves the quality of thinking, thereby enhancing teaching, research, and overall management.

Developing the Ability to Detect New Problems: The ability to detect new problems is a key aspect of critical thinking. High school administrators must possess logical, perceptive, and creative thinking skills to identify new, valuable, or problematic information, as well as to challenge incorrect views. This skill requires flexibility, courage, and sharp reasoning, enabling administrators to recognize and address emerging issues within the school and management environment.

Improving the Ability to Apply Knowledge into Practice: One of the main objectives of political theory training is to help managers effectively apply theoretical knowledge to solve practical problems related to leadership, management, and the development of grassroots Party organizations. The connection between theory and social practice empowers educational managers to creatively and effectively apply theoretical insights to address political tasks at the grassroots level. By doing so, it enhances the quality of education and contributes to the development of human resources, which is essential for the sustainable development of society. This ability to bridge theory and practice is crucial for educational managers because it ensures that theoretical frameworks are not just abstract concepts, but practical tools for improving the operation of schools and the education system. The application of political theory in real-world contexts not only strengthens the leadership and management capacities of school administrators but also ensures that these institutions are aligned with broader societal goals of progress and development. Through this process, educational managers are better equipped to make informed decisions, promote community engagement, and contribute to the long-term success of both educational and social initiatives.

Ultimately, the integration of theory into practice helps create a dynamic, responsive educational environment that adapts to the changing needs of both students and society, while reinforcing the core values of governance and responsibility for the quality of education at the local level.

3.6. Enhancing Evaluation, Criticism, and Decision-Making Skills

Evaluation and criticism are crucial skills in critical thinking, enabling high school administrators to verify the accuracy of information and, from there, make scientific and rational decisions. Practicing these skills through hands-on activities and real-world research helps improve cognitive abilities and problem-solving skills, meeting the leadership and management demands in a rapidly changing society.

Enhancing the critical thinking capacity of high school administrators not only helps them develop independent and creative thinking skills but also contributes to improving the quality of teaching, leadership, and management in the educational environment. This, in turn, addresses the requirements for societal and national development during times of reform. Enhancing critical thinking is a complex process that requires a combination of subjective factors from the thinker and objective factors from the surrounding environment. The essence of this process is to improve the ability to identify, assess, and address problems based on scientific and logical reasoning.

Broad Knowledge and Logical Thinking: The enhancement of critical thinking skills first manifests in the ability to possess broad knowledge and utilize logical thinking to analyze, assess, and make sharp arguments. For high school administrators to develop critical thinking skills, they need a solid foundational knowledge base and the ability to engage in self-assessment and self-criticism. They must avoid fallacies and continuously expand their knowledge to make accurate and rational judgments.

Creating a Democratic Environment: A democratic environment is a prerequisite for the development of critical thinking. In such an environment, teachers and students are encouraged to freely and fairly share their views, debate, and critique. This environment allows for the comprehensive development of critical thinking. A democratic space not only fosters debate but also serves as the foundation for building humanistic and egalitarian values in learning and research.

Political Integrity and Moral Character: The political integrity and moral character of high school administrators greatly influence their critical thinking abilities. Honesty, openness, and responsibility in debates help administrators construct logical arguments and build confidence and persuasiveness in their decisions. Particularly, political integrity helps them stay committed to the theoretical values of Marxism-Leninism, Ho Chi Minh's thought, and the policies of the Communist Party of Vietnam.

Enhancing the critical thinking capacity of high school administrators should be carried out through specific components, such as improving their ability to receive, process, and detect information, applying knowledge to practice, and conducting scientific evaluation and criticism. At the same time, it is essential to build a democratic learning environment, cultivate ethical qualities, and strengthen political integrity to ensure the full potential of critical thinking. This will contribute to effectively carrying out both theoretical and practical tasks in the context of current educational reform.

4. RESULTS AND DISCUSSION

The State of Critical Thinking in Secondary School Administrators: A Case Study in the Mekong Delta, Vietnam. This study explores the state of critical thinking in secondary school administrators in the Mekong Delta, Vietnam. It assesses their ability to analyze, evaluate, and apply critical thinking in their day-to-day management and decision-making. The study aims to identify strengths and weaknesses in the critical thinking skills of this group, assess the impact of these skills on school leadership and educational quality, and propose practical solutions for improvement. The findings provide insights into the challenges faced by administrators in adapting to rapid changes in the education sector, and provide recommendations for promoting a more analytical and critical approach to school management and leadership.

Table 2. Descriptive statistics

Element	Mean	Standard deviation (SD)	Min	Max
Analysis	3.45	0.75	2.1	4.8
Evaluate	3.33	0.78	2.0	4.7
Counter-argument	3.25	0.80	1.9	4.5
Overall	3.34	0.77	2.0	4.7

The overall critical thinking ability of managers is at an average level (Mean = 3.34). Analytical skills are at the highest level (Mean = 3.45), while critical thinking skills are at the lowest level (Mean = 3.25). The standard deviation from 0.75-0.80 shows that the dispersion is not large, and critical thinking ability is quite uniform among subjects.

The mean score of 3.34 for overall critical thinking ability among high school administrators in the Mekong Delta, based on a 5-point scale, indicates an average level of proficiency. However, the standard deviation (SD) of 0.77, which is relatively low, suggests that the variance in scores among the participants is minimal. This implies that the critical thinking abilities of the administrators in the sample are fairly consistent. In other words, while the overall level of critical thinking is average, the small degree of dispersion indicates that the administrators in the study share a similar proficiency level, with few outliers or significant differences in their ability to think critically.

Comparison between the constituent elements: Analysis has the highest average score (3.45, SD = 0.75), proving that this is an outstanding skill in critical thinking of managers. The ability to analyze helps them to assess, explain situations and make reasonable judgments, showing relatively good basic capacity. The assessment achieved an average score of 3.33 (SD = 0.78), ranking second. This skill requires the ability to check, verify information and comment on issues objectively, however, the results show that there are still many limitations. Criticism, the most important factor in critical thinking, has the lowest score (3.25, SD = 0.80). This is a skill that demonstrates the ability to present opposing arguments or criticize issues based on rigorous reasoning, and this low result shows that managers have not really played a good role in criticizing in the process of solving problems or making decisions.

The standard deviation ranges from 0.75 to 0.80 for all factors, indicating that the data dispersion is not large. This reflects that most managers have similar critical thinking skills, with no significant difference between good and weak people in the survey sample. Critical thinking skills have the largest standard deviation (SD = 0.80), demonstrating that there is still a group of staff with significantly low scores, which need to be focused on training.

Table 3. Distribution of percentage (%) according to critical thinking ability

Rating Level	Analysis (%)	Evaluate (%)	Counter-argument (%)	Overall (%)
Weak	5.2%	6.8%	7.1%	6.4%
Average	12.5%	14.3%	16.2%	14.3%
Fair	48.0%	46.0%	45.2%	46.4%
Good	28.3%	27.0%	25.8%	27.0%
Very good	6.0%	5.9%	5.7%	5.9%

About 46.4% of the staff achieved an average level of critical thinking ability, showing that this group is the majority. The number of staff achieving "Good" and "Very Good" levels combined is 32.9%, showing the potential for capacity improvement in this group of staff. The rate of "Poor" and "Very Poor" in the critical thinking group is the highest (23.3%), requiring a focus on improving this skill. This shows that the majority of high school management staff in the Mekong Delta region achieved an average level of critical thinking ability, with a rate of 46.4%. This shows that the majority of staff only achieved a basic level, not really outstanding in using critical thinking effectively.

The combined rate of good and very good staff is 32.9%, reflecting that there is a significant number of staff with outstanding potential and critical thinking ability, which can be the core of educational innovation activities if further training is provided. Notably, the poor and very poor group accounts for 20.7%, a number that cannot be ignored, especially when critical thinking skills are an essential factor in modern educational management.

The rate of staff with good and very good analytical skills is the highest (34.3%, including 28.3% good and 6.0% very good), demonstrating that the ability to identify and process information of managers is relatively good. The rate of poor and very poor analysis group is 17.7%, lower than other skills, proving that this is the strongest point in critical thinking.

The combined rate of good and very good managers is 32.9%, indicating that there is a group of managers with outstanding capabilities and significant critical thinking skills within the

team. This is a positive sign, as this group has strong potential for development in educational leadership and management. These officials, with further training, can play an important role in promoting educational innovation, making informed decisions and solving problems more effectively. Critical thinking ability is a key factor in solving complex problems in the educational environment, and managers with this skill can contribute to creating effective educational reforms. Identifying and training these potential officials will help the education system improve its quality and better meet the development requirements in the current context of educational innovation. Furthermore, these administrators will be key players in promoting a democratic learning environment, encouraging creativity and independent thinking among both teachers and students, thereby creating positive change throughout the entire education system.

Critical thinking, this is the weakest skill, with the highest rate of poor and very poor, reaching 23.3% (16.2% poor, 7.1% very poor). This figure reflects serious limitations in the ability to argue critically, analyze problems from multiple perspectives or make opposing arguments. The rate of good and very good is the lowest (31.5%, including 25.8% good and 5.7% very good), showing that this is an area that needs priority training.

The average level dominates all factors, ranging from 45.2% (critical) to 48.0% (analytical), indicating that critical thinking ability is still concentrated at the basic level, not really achieving outstanding development. Although the good and very good groups account for nearly 1/3, the fact that nearly 1/5 are in the poor and very poor groups reflects a clear differentiation in critical thinking ability among cadres.

Overall assessment and correlation: Analysis is the most prominent skill, with a higher percentage of good and very good than the remaining factors. This shows that managers have a fairly good ability to analyze data and situations, but have not yet taken advantage of this to develop the other two skills. Criticism continues to be a weakness, with a significantly higher percentage of the weakest group, requiring urgent improvement to enhance the ability to handle multi-dimensional situations and make sharp arguments. The assessment is at an average level between analysis and criticism, showing stability but still needs to be nurtured to optimize the ability to synthesize and comment on information.

Comparison of correlations between factors:

Table 4. Correlation matrix between factors (Pearson)

Element	Analysis	Evaluate	Counter-argument
Analysis	1	0.78**	0.72**
Evaluate	0.78**	1	0.75**
Counter-argument	0.72**	0.75**	1

($p < 0.01$: statistically significant correlation)

The correlations between the factors are quite close (r from 0.72 to 0.78). "Analysis" has a strong relationship with "Evaluation" ($r = 0.78$), indicating that good analytical skills contribute to improving evaluation ability. "Reflection" has a lower correlation with "Analysis" ($r = 0.72$), indicating that this skill needs more independent practice. The results of Pearson correlation analysis ($p < 0.01$) show that the relationship between the critical thinking ability factors is quite close, with correlation coefficients (r) ranging from 0.72 to 0.78. This reflects that the factors "Analysis," "Evaluation," and "Reflection" have a complementary relationship in forming overall critical thinking ability.

Analysis and Evaluation ($r = 0.78$): This is the highest correlation in the matrix, indicating that analytical skills play an important role in supporting the ability to evaluate information. A manager who is able to analyze a problem deeply will easily identify the core aspects, thereby making more accurate judgments about information. This is consistent with the fact that evaluation is often based on the detailed, specific information provided by analysis.

The correlation coefficient (r = 0.75) between "Evaluation and Critical Thinking" shows that there is a strong connection between these two skills in the thinking process. This shows that the ability to accurately evaluate information is a fundamental factor in building a solid foundation for effective critical reasoning. When a manager is able to evaluate information scientifically and accurately, they will have the foundation to analyze and make sharp critical arguments, helping to improve the quality of decision making. However, the small difference between the correlation coefficients of "Analysis and Evaluation" shows that critical thinking does not only rely on the ability to evaluate information but also requires the user to be independent and creative. Critical thinking is not only about identifying and evaluating information, but also about applying logical principles to criticize, build arguments, and draw reasonable conclusions. This emphasizes that developing information evaluation skills is important, but not sufficient for developing complete critical thinking. Managers need to further develop independent analytical and creative thinking skills so that they can apply these evaluations flexibly and effectively in problem solving and decision making.

Analysis and Critical Thinking (r = 0.72): This is the lowest correlation in the matrix, reflecting that critical thinking skills are less directly dependent on analytical abilities than evaluation. This may be explained by the fact that critical thinking requires the ability to synthesize information from multiple sources and make comparative arguments, a skill that is not entirely based on detailed data analysis. The relative independence of critical thinking skills suggests that separate training methods are needed to improve this ability.

Close correlation between analysis and evaluation: This result emphasizes the fundamental role of analytical skills in developing evaluation capacity. Therefore, improving analytical skills through practical activities and analyzing real-life situations will contribute to improving the effectiveness of information evaluation.

The interdependence between evaluation and criticism: Evaluation skills are an important prerequisite for building critical thinking skills. Therefore, to improve critical thinking skills, it is necessary to focus on enhancing the ability to evaluate information through multi-dimensional evaluation exercises, such as analyzing the benefits and risks of management decisions.

Relative Independence of Critical Thinking: Although critical thinking is correlated with analysis and evaluation, the lower correlation coefficient indicates that this is a highly integrated skill, requiring the ability to look at problems from multiple perspectives and ask opposing questions. Therefore, separate training programs, such as debate sessions or practice dealing with situations with different opinions, should be designed to develop this skill.

4.1. Target improvement based on correlation results:

Prioritize developing analytical skills: Since analysis is strongly linked to evaluation, investing in developing this skill will have a double effect in improving overall critical thinking.

Enhance assessment exercises: Encourage managers to participate in situational assessment activities that require them to analyze data before making decisions.

Training in independent critical thinking skills: Organize group debates or multi-dimensional discussions, focusing on training the ability to present and defend opposing arguments, helping to develop independent critical thinking skills.

The correlation results not only show the complementarity between the factors but also emphasize the importance of comprehensive and focused training. Combining appropriate development strategies will help improve critical thinking capacity, contributing to improving the quality of local education management.

The critical thinking ability of high school administrators in the Mekong Delta is at an average level = 3.34. This shows that in general, most administrators have basic critical thinking ability but have not reached the optimal level, especially critical thinking skills are the weakest point

= 3.25. The role of analytical skills: Analytical skills not only reach the highest level = 3.45 but also have a strong correlation with both evaluation (r = 0.78) and criticism (r = 0.72). This confirms that improving analytical skills will have a spillover effect, helping to improve the remaining skills in critical thinking ability.Weak staff group needs support: With 23.3% of staff in the "Poor" and "Very poor" group in terms of critical thinking skills, specific intervention programs are needed to improve the capacity of this group. Meanwhile, the number of cadres achieving "Good" and "Very Good" levels only accounted for 32.9%, showing that the average group still has potential for development (46.4%).

4.2. Recommended strategies to improve critical thinking skills:

Specialized training programs. Develop critical thinking skills through systematic and practical training programs. Need to focus on and practice the ability to ask profound critical questions, make logical arguments and compare opinions. Skills to analyze data and information as a basis for critical arguments. Organize seminars and short-term classes specializing in critical thinking. Real or hypothetical educational management case studies, encourage staff to criticize and propose solutions.

Develop a toolkit to assess critical thinking skills based on criteria such as: Accuracy of problem analysis. Ability to evaluate information. Quality of critical reasoning. Implement periodic assessments (every 6 months) to monitor and adjust appropriate training programs.

Environment for practicing critical thinking. Facilitate the application of critical thinking skills to educational management practice. Organize regular scientific debates at schools or educational conferences, focusing on practical issues. Establish professional discussion groups, in which managers are encouraged to give critical opinions and defend their views before colleagues.

5. CONCLUSION

Although the critical thinking ability of managers in the Mekong Delta is at an average level, there is still much potential for improvement. One of the important factors that need to be focused on is critical thinking skills, especially the ability to analyze problems deeply and logically. Analysis is a key factor in critical thinking, because it helps managers not only see problems from many angles but also have the ability to come up with appropriate, creative and effective solutions. To improve the critical thinking ability of managers, it is necessary to prioritize the development of analytical skills. This skill not only helps managers identify problems accurately but also promotes the ability to analyze complex situations in educational practice, thereby making reasonable and scientific decisions. Managers need to be trained to analyze information scientifically, from processing educational data to solving school management problems.

Implementing intensive training strategies that combine theory and practice will play an important role in improving critical thinking skills. Managers need to be provided with opportunities to practice critical thinking through simulated or real-life situations where they can apply their knowledge and analytical skills to solve specific situations. In addition, monitoring and evaluating the effectiveness of practice will help to adjust and improve managers' critical thinking skills. When critical thinking skills are improved, not only will the personal capacity of managers be improved, but it will also contribute significantly to improving the quality of educational management. This will lead to innovation in school management methods, helping to increase transparency, efficiency and create a more favorable educational environment for students. At the same time, when managers have good critical thinking skills, they will contribute to improving the quality of general education in the Mekong Delta, Vietnam, meeting the requirements of modern and sustainable educational development.

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