



Enhancing vocational skills through participatory school management

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Abstract

This study examines the essential function of Participatory School Management (PSM) in improving vocational skills development in secondary schools in Bangkok and seeks to assess perceived deficiencies in existing management procedures. A mixed-methods approach was used, incorporating questionnaires (quantitative data), semi-structured interviews, and student focus groups (qualitative data). The assessment focused on existing management procedures, specifically examining the impact of PSM and identifying principal areas for strategic enhancement, such as administration and budget management. The findings indicate substantial shortcomings in overall administration and budget management, highlighting these as the principal areas for strategic enhancement in vocational programs. The research underscores the critical importance of PSM in promoting a culture of collaboration and autonomy, which is vital for effective vocational education and for more effectively connecting the curriculum with labor market requirements' is an imperative strategy for improving school governance to foster vocational skill development. This study provides significant insights and practical ideas for the specific regional context of Bangkok. The results establish a basis for additional research on the implementation of PSM across various educational settings and may guide governmental initiatives to enhance vocational education in Thailand and elsewhere.

Keywords: Curriculum development, Participatory school management, Secondary education, School administration, Vocational skills

Introduction

The development of vocational skills is essential in secondary education, as it provides students with the practical competencies required for workforce integration and economic contribution [1-4]. The rapid growth of various industries in Bangkok has increased the demand for highly qualified professionals, making enhanced vocational training increasingly essential [5-6]. Educational reform emphasizing both academic and practical skills is necessary for this future workforce [7]. Vocational education was once considered a separate and independent element of the educational system. Current developments underscore the necessity of incorporating vocational skill development into all aspects of school administration to ensure that education remains pertinent and linked to labor market requirements [8-11].

Participatory School Management (PSM), which entails the collaboration of all stakeholders—administrators, teachers, students, and the community—in decision-making, has demonstrated efficacy in improving vocational skills development [12-14]. This research examines the effective use of PSM techniques to enhance vocational abilities among secondary students in Bangkok, with the objective of

reconciling the gap between classroom instruction and practical work requirements.

This study holds significance for several reasons. Firstly, it addresses a significant requirement within Thailand's education system to ensure that students acquire knowledge applicable to the contemporary employment market. The research establishes a relevant and precise framework for its conclusions by focusing on Bangkok, an economic hub [15]. This study especially examines the intersection of PSM and vocational education, despite existing scholarships often addressing them separately [16]. This integrated approach provides a thorough understanding of how collaborative management can directly improve vocational training. The study's focus on Bangkok's unique cultural and institutional context fills a notable void in the literature, often dominated by Western-centric analyses [17-19]. The findings will offer practical, culturally relevant recommendations for legislators and school administrators to implement in their respective institutions.

Literature Review

The role of school management in vocational education: Research consistently highlights the crucial importance of school management in

enhancing effective vocational education. This includes the need to assess the supply and demand for VET skills at a regional level [20]. Researchers [21-23] underscores the necessity of providing students with practical, in-demand skills to close the divide between education and the labor market, particularly during recessions. Establishing an effective vocational training environment necessitates proficiency in managing academic administration, human resources, and financial planning [24-27]. A professional performance evaluation system for teachers is also key to quality assurance [28].

Methods

The impact of participatory management

Consensus exists regarding the significance of participative management in fostering an environment conducive to skill acquisition. This collaborative methodology, which incorporates stakeholder engagement, yields superior and more adaptable teaching strategies [29]. The concept of distributed leadership is seen as a catalyst for school improvement [30]. Research indicates that collaboration among school administrators, educators, and the community significantly enhances educational outcomes, particularly in skill acquisition [29-31]. This approach fosters trust [32], collective accountability, and transparent communication, all of which are crucial to the efficacy of educational programs [33-34]. Educational leadership practices must also be theorized in neoliberal times [35].

Participatory management in vocational contexts

Participatory management offers distinct advantages in vocational education. It guarantees that vocational training programs are relevant and aligned with student needs and labor market demands [36-39]. Moreover, collaborative decision-making allows schools to rapidly adjust and innovate in reaction to continuously changing technological and economic conditions [12, 40]. This is especially relevant for vocational rehabilitation services [41] and for addressing historical factors influencing educational policy [42].

Research gaps

Despite extensive discussions on vocational

education and participatory management, notable gaps in literature remain.

- **Contextual application:** While numerous studies (e.g. [43-44]) illustrate the general benefits of Public Service Motivation (PSM), there exists a paucity of research regarding its specific application to vocational skills development within the Thai educational context, which has its own unique cultural [17] and institutional characteristics. A considerable segment of the present study is based on Western paradigms [45], which may not be immediately applicable to the distinct cultural, economic, and institutional contexts of Thailand. The specific needs of indigenous women [46], special education contexts [47], or pre-vocational classroom discussions [48] highlight the need for context-specific research.
- **Intersection of management domains:** there is a scarcity of research that specifically examines the convergence of participatory management strategies with fundamental administrative domains—such as academic administration, budget management, and human resource management—within vocational education. Understanding these specific topics is crucial for constructing a practical and effective framework. For sampling methodology, for instance, researchers often rely on established models [49].

This study aims to address these deficiencies by investigating how Public Sector Management (PSM) may be tailored to fulfil the specific requirements of vocational education and how its strategies can be modified to confront the unique issues faced by secondary schools in Bangkok.

Research objectives and questions

This study seeks to establish a comprehensive framework for participatory school management strategies to improve occupational skills among secondary students in Bangkok.

Research objectives

The objectives of this study were:

- To determine the primary management requirements across various administrative sectors (academic, financial, and human resources) that impact vocational skills development.
- To examine the fundamental components of participative management that facilitate the enhancement of vocational skills.
- To evaluate the crucial factors that contribute to enhancing the vocational skills of students.

Research questions

To achieve the objectives of this study, the following research questions were established:

- What are the perceived differences between current and desired management methods in key administrative areas (academic administration, financial management, and human resource management) in secondary schools in Bangkok?
- What impact may participatory management strategies have on the acquisition of job skills by secondary school students?
- What are the primary components and strategies of participatory school management that can improve vocational skills among secondary students in Bangkok?

Methods

Research design

This study utilized a mixed-methods research methodology, combining quantitative and qualitative approaches to achieve a comprehensive understanding of the influence of participatory management on vocational skill development.

The quantitative phase was a survey to assess public perceptions of participatory management approaches and their impact. The qualitative phase employed interviews and focus group discussions to examine the lived experiences and perspectives of various stakeholders. This amalgamation of data sources enabled a thorough examination of the research objectives.

Population and sampling: Population and rationale for case study selection

The study's target population comprised of 109 secondary schools governed by the Bangkok Metropolitan Administration (BMA). Choosing Bangkok as the target demographic is rational given its prominence as a major economic and educational center in Thailand. The city's rapid growth and industrial concentration create a significant demand for skilled labor. Therefore, it is imperative to examine the development of occupational skills in this field:

Economic importance: Bangkok functions as Thailand's financial and commercial center, accommodating a multitude of domestic and foreign businesses. The city's economy is multifaceted, comprising service, manufacturing, and tourism sectors. This makes it an ideal platform to evaluate the congruence between occupational skills and labor market requirements.

Educational context: Bangkok, the capital, contains multiple secondary schools overseen by the BMA. This makes it a favorable place for study because of its high population density. The number of schools is adequate to produce statistically significant outcomes. The city serves as a microcosm of the larger issues and potential inside the national education system.

Policy relevance: Research conducted in Bangkok can provide immediate insights for national authorities. The challenges and successes of establishing participatory management and vocational programs in the capital can serve as a good lesson or cautionary example for other regions in Thailand.

Feasibility: As the schools are situated within the same jurisdiction of the BMA, data collection, encompassing in-person interviews and focus groups, is rendered more efficient and cost-effective than researching across different provinces.

Sampling and sampling selection: The study participants were selected by a two-stage sampling method. This approach employed probability sampling to select schools and non-probability sampling to identify key informants.

Table 1. Frequency and percentage of respondents' demographic information

Demographic Category		Frequency	Percentage (%)
Gender	Male	38	20.77
	Female	145	79.23
Age Group	20-30 years	4	2.19
	31-40 years	14	7.65
	41-50 years	88	48.09
	51 years or more	77	42.07
Education Level	Bachelor's Degree	58	31.69
	Master's Degree	114	62.30
	Doctoral Degree	11	6.01
Position	School Director	22	12.02
	Deputy School Director	70	38.25
	Head of Vocational Education or Teachers	91	49.73
Years of Experience	Less Than 1 Year	35	19.13
	1-5 years	43	23.50
	6-10 years	4	2.18
	11-15 years	17	9.29
	16-20 years	25	13.66
	21-25 years	25	13.66
School Size	Small (less than 300 students)	29	15.85
	Medium (300-600 students)	56	30.60
	Large (more than 600 students)	98	53.55
Experience in Developing Vocational Skills of Students	Less Than 1 Year	23	12.57
	1-5 years	61	33.33
	6-10 years	21	11.48
	10 years or more	78	42.62
Total		183	100.00

The initial step was employing stratified random sampling to select 86 schools from the 109 secondary schools administered by the Bangkok Metropolitan Administration (BMA). This methodology, utilizing the Krejcie and Morgan (1970) table, ensured that the selection of schools was statistically representative, allowing the results to be generalized to all BMA schools.

The second step utilized a purposive sampling strategy to select three key informants from each of the 86 designated schools. The school director, deputy director, and head of the vocational education department were selected according to their distinct roles and expertise in their respective fields. This ensured that the collected data was comprehensive, detailed, and appropriately aligned with the study's emphasis on school management. Of the 258 potential responses, 183 were successfully obtained, resulting in a response rate of 70.93%. The demographic characteristics of the participants, presented in Table 1, reveal a varied sample regarding professional roles and experience.

The demographic analysis of the 183 respondents provides crucial contextual information for the study's findings. The sample predominantly comprises experienced female educators with advanced degrees employed in larger universities.

- **Gender and age:** Many respondents were female (79%). The sample was predominantly older, with the greatest demographic aged 41 to 50 years (48%), followed by individuals over 51 years (42%). This indicates that the participants possess substantial professional expertise.
- **Education:** Over 62% of respondents possessed a master's degree, indicating that the professional sample was well educated.
- **Professional role:** The sample was directly relevant to the study's objective, with over 50% of respondents occupying positions as heads of vocational education or vocational skills teachers. A significant proportion of deputy school directors (38%) and school directors (12%) gave an in-depth analysis of the various leadership tiers.
- **Experience:** A notable number of respondents had over 20 years of professional experience (32%), while a

substantial proportion possessed more than 10 years of experience in vocational skill development (43%). This extensive experience provides insights from both seasoned pros and novices.

- **School size:** Most participants (54%) worked in institutions with more than 600 students, potentially offering more resources to support comprehensive vocational programs. These demographic characteristics ensure that the study's findings are grounded in the perspectives of a highly qualified, seasoned, and pertinent group of educators and leaders. This enhances the credibility of conclusions about the development of vocational skills.

Data analysis

Quantitative data analysis

Thematic analysis was employed to examine the qualitative data derived from the interviews and focus groups. This approach encompassed:

- **Transcription:** All recordings of interviews and focus groups were transcribed verbatim.
- **Coding:** The transcripts were systematically analyzed to identify recurring themes, patterns, and concepts.
- **Theme identification:** Related codes were aggregated to form broader topics such as collaboration with stakeholders, decision-making, and challenges in vocational education. The qualitative findings were employed to contextualize and augment the quantitative data, resulting in a deeper understanding of the relationship between participatory management and vocational skill development. The triangulation of data from all three instruments ensured the study's conclusions were robust and reliable.

This study employed descriptive statistics to analyze the survey data. This encompasses details regarding the participants' demographics and their perceptions of the questionnaires. The data were presented as percentages, frequencies, and mean scores. It also employed the modified PNI score to identify the crucial areas for enhancing management procedures. This score illustrates the disparity between "what it is" and "what it should be."

Validity and reliability

The reliability and validity of the study instruments were rigorously assessed. A cohort of subject matter experts reviewed the interview guides, focus group discussion methods, and survey questionnaires to ensure their content validity. The researcher utilized their feedback to enhance the instruments, ensuring they were completely and precisely aligned with the study's research objectives.

Cronbach's alpha was employed to assess the internal consistency of the survey questionnaire. A pre-test was conducted with 30 people from a similar, non-sampled cohort. Cronbach's alpha value of 0.82 indicated robust internal consistency, signifying that the survey items reliably assessed the intended constructs. The pre-test findings indicated that no significant modifications were necessary prior to the final data collection.

Ethical considerations

Ethical issues are crucial in research to protect the safety, dignity, and rights of all participants. This research on school management will adhere to the subsequent ethical principles and practices.

Informed consent

- **Principle:** Participants must voluntarily consent to participate in the study after being fully informed about its objectives, procedures, potential risks, and benefits.
- **Practice:** Prior to the interviews, focus groups, or surveys, all participants would receive a concise and comprehensible document. This paper will elucidate the study's purpose, the use of the data, and the voluntary nature of participation. They would be explicitly informed that they may depart at any moment without repercussion. All participants must sign a consent form.

Confidentiality and anonymity

- **Principle:** To prevent any harm or adverse consequences, the identities of the participants and their responses must remain confidential and anonymous.
- **Practice:** All data, encompassing interview

transcripts and survey responses, will have personally identifiable information redacted. This encompasses names, educational institutions, and specific job titles. To ensure anonymity, each participant will be assigned a distinct code or pseudonym, such as "Director A" or "Teacher B." The research team would be the sole individual permitted to see the raw data, which would be securely stored in a password-protected file.

Protection from harm

Principle: Researchers must protect participants from any physical, psychological, social, or professional harm.

Practice: The interview and focus group questions will be crafted to avoid sensitive or contentious topics. The research team acquires skills to manage potential discomfort and to terminate the interview or conversation if a participant exhibits indicators of distress. The study protects participants from potential professional repercussions for offering frank critiques of school management by ensuring anonymity.

Data security and integrity

- **Principle:** To maintain data integrity and protect privacy, it is imperative that all information is securely stored and appropriately managed.
- **Practice:** A secure server would store all study data. Access will be granted exclusively to the researchers involved in the initiative. Upon completion and publication of the study, the data would be either archived or disposed of in accordance with established research protocols to ensure long-term privacy protection.

Transparency and objectivity

Principle: The study's methodology, findings, and any potential conflicts of interest must be explicit. The researchers must maintain objectivity throughout the inquiry.

Practice: The final report will provide extensive details regarding the methodology, encompassing the

sample collection process and data analysis procedures. Any such biases would be identified. The study's conclusions will depend solely on the acquired data, free from any modification or deceit.

Findings

This study provides critical insights into the effectiveness of school management in fostering vocational skills development in secondary schools in Bangkok. The results are structured to address the research queries directly.

Perceived gaps in management practices

The major objective of this study was to identify the perceived gaps between current and desired management practices in key administrative areas. The survey data presented in the table below revealed significant disparities, with the most pronounced gaps indicating the critical areas requiring improvement

Table 2. Perceived gaps in participatory management practices

Administrative Area	PNI Modified Score	Rank
General Administration	0.075	1
Budget Management	0.055	2
Human Resource Management	0.042	3
Academic Administration	0.025	4
Overall Average	0.050	

The quantitative data unequivocally indicated that General Administration and Budget Management exhibit the most significant deficiencies. The qualitative data obtained from the semi-structured interviews and student focus groups provided significant context. Individuals frequently expressed their frustration on issues beyond mere statistics. For instance, during interviews, a school director discussed the challenges of obtaining funding from external sources. He stated, "The budget allocated by the BMA is insufficient for contemporary equipment." We require private enterprises; however, we lack the means to establish contact with them. This sentiment was articulated in discussions with student focus groups, where one student remarked, "We are learning on outdated machines." Technology significantly diverges in the real world. It appears

that we are not adequately prepared.

The quantitative data unequivocally indicated that General Administration and Budget Management encountered the most significant issues. The qualitative data obtained from the semi-structured interviews and student focus groups offered substantial context. Individuals frequently expressed their anger regarding issues that extend beyond mere statistics. A school director stated in an interview that securing funding from external sources is challenging. He stated, "The BMA's budget is insufficient for new tools." We require private enterprises, yet we lack a method to contact them. During student discussions in focus groups, one participant remarked, "We are learning on outdated machines," reflecting their sentiments. Technology exhibits significant differences. "It appears that we are not adequately prepared."

Influence of participatory management

The second objective was to ascertain the impact of participatory management on the enhancement of occupational skills. The findings indicate that critical components of PSM, such as establishing shared objectives, fostering trust, and promoting autonomy, are regarded as essential for enhancing job skills. The survey data presented in the table below indicates that current methods are usually effective; yet there is a clear demand for minor adjustments to enhance them.

Table 3. Perceived needs for improving participatory management practices

Participatory Management Element	PNI Score	Modified	Rank
Setting Shared Objectives and Goals	0.037		1
Communication and Information Exchange	0.023		2
Independence in Tasks and Responsibilities	0.022		3
Commitment to the Organization	0.013		4
Commitment to the Organization	0.013		4
Mutual Trust	0.011		5
Overall Average	0.020		

The overall PNI score indicates a minor discrepancy;

however, the qualitative data reveals a more intricate scenario. Participants concurred that individuals possess the capacity for involvement; yet their contributions are frequently perceived as mere ostentatious gestures rather than substantive decision-making authority. Interviews with educators revealed their need for increased autonomy. A teacher remarked, "We are solicited for our opinions on the curriculum, yet the ultimate decision is typically made by someone in a superior position." "We must cultivate self-trust in our decision-making." Participants in the focus group discussions expressed a desire for increased practical engagement. One child stated, "We desire to choose the skills we acquire..." The school should not merely dictate our future career aspirations; it ought to solicit our input.

This qualitative data constitutes a significant component of the quantitative results. The statistics may suggest favorable results; however, the participants' experiences indicate a necessity for genuine engagement rather than cursory involvement. The data indicates that for PSM to be effective in the workplace, it must go beyond merely gathering opinions to a framework where stakeholders possess genuine authority and accountability.

Key synthesis points include the following:

- **Administrative and budgetary gaps:** This qualitative data represents a crucial element of the quantitative findings. The numbers may imply positive outcomes; nonetheless, the individuals' experiences reveal a need for authentic participation rather than superficial involvement. The findings indicate that for PSM to thrive in the workplace, it must evolve beyond mere opinion collection into a framework where stakeholders possess genuine authority and accountability.
- **Perceptions of participatory management:** The survey quantitatively indicated that participative management approaches were already relatively strong. However, interviews with educators and focus groups with students revealed a contrast perspective. Despite the urge to engage, participants often perceived their involvement as superficial. This suggests that

although the numerical data appears satisfactory, the qualitative insights reveal the necessity to transcend superficial participation towards genuine empowerment, wherein stakeholders have authentic authority and accountability in decision-making processes.

- **Holistic view:** Combining these two data sources significantly reinforces the study's conclusions.

The survey results indicate areas for improvement, while the interviews and focus groups provide the necessary context and human perspective to formulate effective, customized solutions. This mixed-methods approach provides a comprehensive overview, indicating that enhancing vocational skills necessitates modifications in school operations beyond just financial and administrative adjustments. Educators must transition from a top-down, centralized model to a more genuine, collaborative, and decentralized approach.

Key factors and strategies for improvement

The study identified significant variables and improvement strategies based on both quantitative and qualitative data, as illustrated in Figure 1.



Figure 1 Key factors and strategies for improvement

Figure 1 outlines the crucial elements and possible solutions for improving the situation. Presented below are some components and strategies:

- **Strengthening external partnerships:** The survey data revealed that this was a principal

concern, and the interviews clarified the reasons. School authorities and students concur that collaboration with local enterprises is the most effective means to obtain modern equipment, practical experience, and valuable skills. A director stated, "The most effective training occurs in the workplace." We require a definitive method to transport our students there.

- **Enhancing budgetary management:** The survey revealed financial disparity, whereas the interviews provided unequivocal responses to the issue. Stakeholders suggested alternatives, including the establishment of a designated budget for vocational training and the execution of a transparent process for acquiring private funding.

Empowering Stakeholders through Shared Governance: The qualitative data from the interviews and focus group discussions revealed a substantial demand for enhanced genuine engagement. The findings suggest a strategy of decentralizing decision-making and providing teachers and students with greater autonomy to foster a sense of ownership and commitment, which is essential for the success of vocational programs.

Discussion

The findings of this study indicate that secondary school students in Bangkok necessitate enhanced management strategies to augment their practical skills. A key finding is that Participatory School Management (PSM), which emphasizes collaborative decision-making, trust-building, and stakeholder engagement, is essential for effective vocational education [12, 31]. The analysis indicates significant shortcomings in general administration and financial management, both of which are critical for the success of any vocational program [24], [26]. The qualitative data obtained from interviews and focus group discussions indicated a significant need for improved authentic engagement. The findings indicate a strategy of decentralizing decision-making and granting teachers and students greater autonomy to foster a sense of ownership and commitment, which is essential for the efficacy of vocational programs [13,46]. This approach aligns with promoting trust in successful schools [32] and

addressing complex administrative challenges ^[11].

Synthesis of findings

The data revealed that general administration and budget management exhibit the most significant disparities between the actual and projected conditions. The qualitative data elucidated the rationale by demonstrating that stakeholders were dissatisfied with the government's financial constraints and the lack of defined protocols for collaboration with external partners ^[25, 37]. This synthesis demonstrates that a strong administrative and financial foundation is essential for vocational training to be effective. Even the most exemplary curriculum and the most committed educators will struggle in its absence ^[19].

The survey indicated satisfactory participation; however, the interviews and focus groups revealed a need for more profound engagement beyond superficial involvement. Educators and learners seek not merely a seat at the table; they desire genuine autonomy and influence over decisions that affect them personally. The evidence indicates that to achieve genuine dedication and ownership in vocational education, we must transition from superficial involvement to authentic empowerment ^[12, 30].

The study's findings corroborate the current research on vocational skills development and participatory management. Prior research on workplace learning ^[25] and facilitating classroom discussion in pre-vocational education ^[44] has consistently illustrated the critical importance of school management in enhancing vocational education, a finding that our study supports. The emphasis on aligning occupational skills with labor market requirements ^[21, 34] is a significant trend identified in our data. Furthermore, the goal of reducing skill mismatch is reinforced by other regional studies ^[20].

This study provides a unique, contextually pertinent perspective. Prior research has predominantly concentrated on Western contexts; however, our findings provide a framework that is culturally and economically relevant to Bangkok ^[17]. The challenges stem not only from management in general but also from the absence of external partnerships and financial resources. This research rectifies a notable

deficit by providing practical, tailored insights for a specific regional context, filling a gap often dominated by Western paradigms ^[45]. The focus on local relevance is key to addressing the unique challenges of educational development in Southeast Asia ^[11].

Conclusion

This study successfully achieved its primary objectives by illustrating that the strengthening of school administration is essential for the advancement of vocational skills in secondary schools in Bangkok. The results, derived from both quantitative and qualitative data, provide a clear and valuable depiction of the issues and opportunities inside the system.

The primary objective was to ascertain individuals' perceptions of the issues pertaining to school management. The investigation indicated significant deficiencies in overall administration and budget management, consistently highlighted by the PNI scores and supported by the candid feedback from school staff and students. The identified inadequacies indicate that an antiquated administrative and financial framework obstructs the development of effective vocational training programs.

The secondary objective was to ascertain the impact of Participatory Management (PSM) on various factors. The research demonstrated that PSM is a crucial framework for effectively fostering a collaborative educational environment. Preliminary survey data suggested strong participation; however, a comprehensive analysis revealed a need for meaningful involvement, with stakeholders requesting genuine autonomy and meaningful impact in effective decision-making.

This study demonstrates that improving occupational skills requires a dual approach. Initially, educational institutions must address significant issues pertaining to their administration and financial management. Secondly, it is essential to cultivate a culture of genuine engagement that ensures every individual is heard. By concentrating on these two domains, educational institutions can successfully connect classroom instruction with the labor market's requirements.

The secondary purpose was to comprehend the impact of participatory management (PSM). The study validated that PSM is an essential framework for promoting a collaborative educational atmosphere. Initial survey data indicated robust participation; nevertheless, a comprehensive study uncovered a demand for substantive engagement, as stakeholders seek authentic autonomy and influence in decision-making.

This research demonstrates that enhancing occupational skills necessitates a dual approach. Initially, educational institutions must rectify significant administrative and budgetary deficiencies. Secondly, they must foster a genuinely participative culture that empowers all stakeholders. By concentrating on these two domains, educational institutions can successfully connect classroom instruction with the labor market's requirements.

Limitations and suggestions for future research

Numerous constraints limit the results of this study, indicating opportunities for future research. The study exclusively examined secondary schools in Bangkok, limiting the applicability of its findings to other locations. The findings may not be applicable to other regions of Thailand, particularly rural areas, which possess distinct requirements for resources and labor. To address this, more research should examine additional educational environments, including both public and private vocational institutions outside primary urban areas.

Second, this research did not examine the specific challenges or impediments to implementing the recommended changes, such as institutional resistance or inadequate resources. Therefore, subsequent studies should investigate the obstacles that educational institutions face when executing participative management practices.

Ultimately, this research, as a cross-sectional study, does not capture the long-term effects of improved management practices on student outcomes. Longitudinal studies are essential to assess the impact of these alterations on students' career trajectories and continuous skills improvement over time.

The challenges identified in Bangkok, including the

need for robust international relationships and genuine stakeholder engagement, are prevalent in numerous developing economies. Future research may do comparative evaluations of school management in other Southeast Asian countries or similar regions. This would assist in identifying both universal principles and regional adaptations for the execution of good vocational education programs.

This study effectively accomplished its primary goals by demonstrating that enhancing school administration is crucial for the development of vocational skills in secondary schools in Bangkok. The findings, derived from both quantitative and qualitative data, provide a clear and informative overview of the system's challenges and opportunities.

The primary objective was to ascertain public perceptions regarding the deficiencies in school administration. The study revealed significant issues in overall administration and financial management. The PNI scores elucidated this point, and the candid response from faculty and students corroborated it. These gaps demonstrate that an antiquated approach to financial management and business operations hinders the establishment of effective vocational training programs.

The secondary objective was to ascertain the impact of Participative Management (PSM) on organizational dynamics. The research validated that PSM is an essential framework for promoting a cooperative educational atmosphere effectively. Preliminary survey data suggested significant participation; however, further investigation revealed a yearning for meaningful engagement, with stakeholders seeking genuine autonomy and influence in decision-making.

This study conclusively demonstrates that enhancing occupational skills necessitates a dual strategy. Initially, educational institutions must address significant problems regarding their operational management and financial expenditures. Secondly, they must cultivate a culture of genuine engagement in which all individuals have a voice. Educational institutions can effectively reconcile the disparity between classroom learning and employer expectations by concentrating on these two domains.

The second objective was to examine the impact of Participatory Management (PSM). The research confirmed that PSM is a crucial framework for fostering a collaborative educational environment. Preliminary survey data suggested strong participation; nevertheless, a comprehensive analysis revealed a need for significant engagement, with stakeholders desiring genuine autonomy and impact in the decision-making process.

This study reaches a definitive, evidence-based conclusion: enhancing vocational skills necessitates the utilization of two distinct methodologies. Initially, educational institutions must address critical issues pertaining to their administration and financial management. Secondly, it is essential to cultivate a culture of genuine engagement that ensures all individuals are heard. Educational institutions can successfully connect classroom instruction with labor market requirements by focusing on these two domains.

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Appendix A Sample Survey Questionnaire

This sample questionnaire is designed to quantitatively measure participants' perceptions of participatory management practices and their perceived impact on vocational skills development in secondary schools. The questions are structured using a Likert scale to capture a range of opinions and are categorized by the key domains identified in the study.

Section 1: Demographic information

This section is for statistical purposes only. All responses will be kept confidential.

1. Current position

- School Director
- Deputy School Director
- Head of Vocational Education / Vocational Skills Instructor
- Other (please specify): _____

2. Years of experience in current position

- Less than 1 year
- 1–5 years
- 6–10 years
- 11–15 years
- 16–20 years
- More than 20 years

3. School size (approximate number of students):

- Small (less than 300 students)
- Medium (300-600 students)
- Large (more than 600 students)

Section 2: Perceptions of Participatory Management Practices

Please indicate the extent to which you agree or disagree with the following statements regarding the current practices in your school. (1 = Strongly Disagree, 5 = Strongly Agree)

Statement	1	2	3	4	5
A. Shared Objectives and Goals					
1. School administrators, teachers, and other stakeholders collaboratively set clear goals for vocational skills development.					
2. We have clear, actionable agreements for the development of students' vocational skills.					
3. Stakeholders regularly review and improve our goals for vocational skills development.					
B. Mutual Trust					
4. I have confidence in my colleagues' abilities to effectively teach vocational skills.					
5. All stakeholders share responsibility for the outcomes of our vocational programs.					
6. There is a high level of trust and collaboration among colleagues in my school.					
C. Autonomy in Tasks and Responsibilities					
7. I have the freedom to carry out tasks related to vocational skills development.					
8. I have independence in thinking and making decisions about vocational programs.					
D. Decentralization of Authority and Joint Decision-Making					
9. Our school provides opportunities for teachers to participate in planning for vocational skills development.					
10. Our school provides opportunities for stakeholders to participate in evaluating vocational programs.					
E. Communication and Information Exchange					
11. Communication channels regarding vocational education are open and transparent for all stakeholders.					
12. Information about vocational program changes and updates is effectively shared.					

Section 3: Perceptions of School Management Practices in Key Areas.

Please indicate the extent to which you agree or

disagree with the following statements regarding your school's practices. (1 = Strongly Disagree, 5 = Strongly Agree)

Statement	1	2	3	4	5
A. Academic Administration					
1. Our school curriculum for vocational skills is flexible and aligns with the local community's needs.					
2. Our school provides a curriculum that emphasizes hands-on, practical training.					
3. Our school promotes the use of various learning resources (inside and outside the school).					
B. Budget Management					
4. Our school allocates a sufficient budget for supporting vocational skills teaching.					
5. Our school provides adequate materials, equipment, and resources for vocational education.					
6. Our school collaborates with external organizations to secure funding and resources for vocational programs.					
C. Human Resource Management					
7. Our school provides adequate professional development for teachers to support vocational skills.					
8. Our school assigns teaching tasks to teachers based on their vocational expertise and abilities.					
9. Our school provides a supportive and resource-rich environment for vocational teachers.					
D. General Administration					
10. Our school has strong partnerships with vocational institutions and local businesses.					
11. Our school encourages students to participate in career planning.					
12. Our school promotes the use of local enterprises as practical training sites for students.					

Section 4: Ideal State of School Management (Desired Situation) disagree with the following statements regarding your school's practices. (1 = Strongly Disagree, 5 = Strongly Agree)

Please indicate the extent to which you agree or

Statement	1	2	3	4	5
A. Academic Administration					
1. Our school curriculum for vocational skills is flexible and aligns with the local community's needs.					
2. Our school provides a curriculum that emphasizes hands-on, practical training.					
3. Our school promotes the use of various learning resources (inside and outside the school).					
B. Budget Management					
4. Our school allocates a sufficient budget for supporting vocational skills teaching.					
5. Our school provides adequate materials, equipment, and resources for vocational education.					
6. Our school collaborates with external organizations to secure funding and resources for vocational programs.					
C. Human Resource Management					
7. Our school provides adequate professional development for teachers to support vocational skills.					
8. Our school assigns teaching tasks to teachers based on their vocational expertise and abilities.					
9. Our school provides a supportive and resource-rich environment for					

vocational teachers.					
D. General Administration					
10. Our school has strong partnerships with vocational institutions and local businesses.					
11. Our school encourages students to participate in career planning.					
12. Our school promotes the use of local enterprises as practical training sites for students.					

Appendix B Sample Semi-Structured Interview Guide

This guide is designed for interviews with key stakeholders (e.g., school directors, teachers, heads of vocational departments) to gather in-depth qualitative data. The semi-structured format allows for a conversational flow while ensuring all key topics are covered.

Section 1: General School Management and Vocational Education

1. Can you describe your school's current approach to vocational skills development?
2. In your opinion, what is the biggest challenge your school faces in providing effective vocational training?
3. How does your school currently allocate resources (e.g., budget, equipment) for vocational programs?
4. How does your school currently engage with local businesses or vocational institutions?

Section 2: Participatory Management Practices

1. How are decisions about vocational programs made in your school? Who is involved in the process?
2. Do you feel that your voice is heard and that

your contributions are valued in these decision-making processes?

3. Can you describe a time when a group of teachers, students, or community members collaborated on a project for vocational education? What was the outcome?
4. Do you feel a sense of trust and shared responsibility among your colleagues when it comes to vocational skills development?

Section 3: Bridging the Gap and Future Directions

1. Based on your experience, what one change would you make to improve your school's vocational education program?
2. How do you believe student voices and opinions are incorporated into the management and planning of vocational skills training?
3. In an ideal scenario, how would a school's management structure be designed to best support vocational skills development?
4. What kind of support or training do you think school administrators and teachers need to improve vocational education?

Appendix C Sample Focus Group Discussion (FGD) Guide for Students

This guide is designed to facilitate a focus group discussion with students, aiming to gather their perspectives on vocational programs and how their voices are included in school management. The questions are open-ended to encourage a free-flowing conversation.

Section 1: Experiences with Vocational Programs

1. What vocational skills courses or activities have you participated in at this school?
2. What do you enjoy most about these vocational programs?
3. What is one thing you would change about the

vocational programs at your school if you could?

4. Do you think the skills you're learning will be useful for a future job? Why or why not?

Section 2: Student Participation and Influence

1. Do you feel like you have a say in what vocational skills or courses are offered at your school?
2. Have you ever been asked for your opinion on how to improve a vocational program? If so, what was that experience like?
3. How does your school's management (

- 4. directors, teachers) involve students in making decisions about school activities or programs?
- 5. If you had the chance to sit down with your school's director, what would you tell them about the vocational programs?

Section 3: Overall Perceptions and Recommendations

In your own words, what does it mean for a school to be "managed well"?

Do you believe a school's management style affects how well students learn vocational skills? If so, how?

- 1. If you could give one piece of advice to your school's leaders on how to better support students' vocational skills, what would it be?