# The Development of Basic Education School Accounting Administration System under the Office of Basic Education Commission

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#### **Abstract**

This research aimed to: 1) study the current situation, the problem, and the need for developing the basic education school accounting administration system 2) develop the system, and 3) evaluate the findings. The samples were system investigation and analysis, questionnaire asking the current situation, problem, and need of basic education school accounting administration system. The respondents in primary education were 398 administrators, 398 practitioners, 125 internal auditors. For secondary education, were 398 administrators, 398 practitioners, and 38 internal auditors. The good practice school in accounting, was studied by using the structured interview from 2 secondary schools and 2 primary schools selected by purposive sampling. The developed basic education school accounting administration system, was administered in 2 secondary schools and 3 primary schools. The research findings found that Phrase 1: the current situation, problem, and need of the system was in "Low" level. The problem and need for developing system in the secondary schools and primary schools was in "High" level. Phrase 2: the system consisted of 6 major factors, 17 sub-factors. Phrase 3: the system implementation and verification were as follows: (1) the average value in opinion of the administrators, practitioners, the financial and accounting auditors was higher than before participating in workshop at .01 significant level, (2) the average value in evaluating competency after using the system, was higher than before using the system at .01 significant level, (3) the opinion of the appropriateness/work practice of major factors, the appropriateness, and the correctness was in "High" level, (5) the average value in satisfaction of the administrators, and practitioners was in "High" level, and (6) the average value in satisfaction of the administrators, and practitioners, and the auditors, on the quality of accounting information was in "High" level.

Keywords: system development, accounting management system, quality of accounting information

# 1. Introduction

Nowadays, the Educational Institutions in Thailand were specified as Juristic Person based on the official management rule of the Ministry of Education, was congruent with National Education Act B.E 2542, assigning the decentralization for Educational Institutions to provide Educational Management including: the academic work, the budget management work, the staff management work, and the general work management. (The Office of Basic Educational, 2006, p. 1) The objective was to provide freedom for school. The accounting administration in basic education school was a part of budget management, and accounting system specified by the Ministry of Finance for sub-work units I Central Region as well as Regional Area to practice in the same guideline since B.E 2515. (The Handbook of Accounting for Sub-work Unit B.E 2515, the Office of Basic Education Commission, 2001, p. 1) Later on, in 2001, there was a change to cancel the cash book especially in Primary Education by focusing on financial practice guidelines in school, the financial control system of sub-work unit B.E 2544 (The Handbook for Internal Audit of school, the financial control system of sub-work units B.E 2544, the Office of Basic Education Commission, 2001, p. 1).

The Accounting Work of basic education school, was to practice following the rule, regulation, and order as well as the accounting principle and policy, the accounting practice used the criterion of remaining, the report

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recording of accounting in dual accounting system (The Comptroller General's Department of Thailand, 2004, p. 26-30) by concluding, analyzing, and interpreting with principle (Sangwanloi, 2007, p. 4-5), and the report of financial and accounting information aimed to control cash in responsibility as well as report the number and type of remained finance, collect the important document sending to the Educational Service Area Office as the withdrawer (Sirisuthi, 2007, p. 233), and report the financial and accounting information with quality.

Quality of Accounting Information was an accounting information report being useful for economic decision making (Kietkrajai & Srijanpech, 2004, p. 4-11) as the understandable information, the related decision making, the reliability, and the comparability (Priebjariyawat, 2006, p. 3-5). The quality of accounting information was an important variable since the accounting information was basic information which caused the school administrators and related persons to know correct situation in the school financial and accounting, and the school financial status.

Recently, the financial and accounting system was facing the financial and accounting system, the financial and accounting work were incorrect, slow, and not up to date. (Jamjit, 2010, p. 3) It was caused because most of school financial staffs didn't graduate or have their Educational Degree in financial and accounting directly. As a result, they didn't have enough knowledge and comprehension in rule and regulation. (Sanhouse, 2010, p. 3) Moreover, the accounting officers didn't follow the rule, regulation, and order. Consequently, the mistakes were occurred. There were no monitoring as well as following up. The money withdrawal was delayed. The document using in withdrawal wasn't complete or correct. (Singkasalerd, 2011, p. 3) The financial and accounting system management was not clear. Consequently, there was no understanding in service providing and service giving between the financial and accounting officers, and the school staffs or the staffs in other work units. (Pongpid, 2011, p. 4) The financial system for money spending wasn't congruent with the real need. These problems affected the school accounting administration leading to the incorrect financial and accounting report, and the financial and accounting information didn't have quality.

Therefore, each school has to study the implementation of accounting practice which could affect quality of accounting information so that the management of school accounting management would be quality school accounting management which could be able to make decision correctly and efficiently. (The Association of Accountants and the Licensed Accounting Investigators of Thailand, 2004, p. 26-30)

## 2. Research Purposes

- 1) To study the current situation and problem in using the accounting work management system of former basic education school, and need in developing the accounting work management system of former basic education school, under jurisdiction of the Basic Education Commission.
- 2) To develop the accounting work management system of basic education school, under jurisdiction of the Basic Education Commission, and the handbook for system use.
- 3) To evaluate the findings in usage of accounting work management system of basic education school, under jurisdiction of the Basic Education Commission.

# 3. Research Method

The phases and steps of study in process of Research and Development in accounting work management system of basic education school, under of the Basic Education Commission as shown in Figure 1.

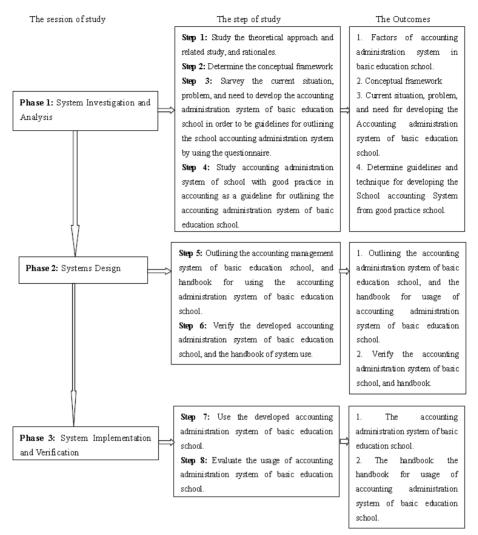


Figure 1. The stage and step in developing the accounting administration system of basic education school

## 3.1 Research Implementation

**Phase 1:** System Investigation and Analysis. The current situation, problem, and need for accounting administration in basic education school, was studied by using the questionnaire. The respondents in primary education level samples were 398 school administrators, and 398 officers practicing the accounting work, 125 internal auditors of primary educational area office. For secondary education, the respondents were 398 school administrators, 398 the accounting work officers, and 38 internal auditors of secondary educational service area office.

The good practice school in accounting, was studied by using the structured interview regarding to the implementation of 2 secondary schools and 2 primary schools selected by purposive sampling. The respondents were 2 school administrators, 2 accounting practitioners, and 2 financial and accounting auditors.

**Phase 2:** The System Design. The design of system by using the research findings included the following implementation: 1) outlining the accounting administration system in basic education school, using the information from Part 1, the findings of questionnaire asking the need for accounting administration system in basic education school, the findings of need in each item were in "High" and "the Highest" levels. Part 2: the findings from Interview, the study of current situation of system in school with good practice in accounting. Both parts were synthesized into the outline of accounting administration system in basic education school, consisted of 6 major factors, 17 sub-factors, and 2) verifying the tentative system as well as handbook for using the accounting administration system in basic education school, by 7 experts to check the appropriateness and possibility in work practice of tentative system. Then, it was improved and corrected in order to be correct and complete accounting administration in basic education school.

**Phase 3:** The System Implementation and Verification. The accounting administration system in basic education school, was used with 2 secondary schools, and 3 primary schools as purposive sampling. The accounting administration was implemented by providing the workshop regarding to knowledge as well as comprehension in rule, regulation, and order of school accounting. The participants were the school administrators, accounting practitioners, the financial and accounting auditors. The accounting practitioners used the principle of 4 factors in management cycle as PDCA (Sokovic, 2010, p. 476-478) including: 1) Plan: P (Planning) the planning for implementation, 2) Do: D (the practice according to plan) 3) Check: C (the investigation of error or mistake) 4) Act: A (the improvement in the mistake), for the accounting practice technique, and the school accounting administration.

#### 4. Research Results

The research findings based on research objectives, p. 1) to study current situation, problem in using the accounting administration in former basic education school, and need for developing the accounting administration system, 2) to develop the accounting administration system of basic school under jurisdiction of the Office of Basic Education Commission as well as the handbook for system usage, and 3) to evaluate the findings of usage in the accounting administration system of basic education school under of the Office of Basic Education Commission, the research findings were presented as follows:

1) The current situation, problem in using the accounting administration in former Basic Education School, was shown in Table 1-2.

Table 1. The analysis findings of current situation, problem, and need in the accounting administration of basic education school, under the office of basic education commission, in overall

School Accounting Administration Work	Current Situation			Problem			Need		
	X	SD	Level	X	SD	Level	X	SD	Level
1. Input Factor	2.74	0.24	Moderate	4.01	0.19	High	4.21	0.18	High
2. Process	2.33	0.27	Low	4.04	0.20	High	3.94	0.21	High
3. Product	2.23	0.36	Low	3.90	0.35	High	4.12	0.39	High
4. Outcome	2.48	0.25	Low	3.96	0.26	High	4.26	0.23	High
5. Feedback	2.30	0.35	Low	3.81	0.37	High	3.89	0.40	High
Overall	2.41	0.14	Low	3.94	0.14		4.07	0.15	High

According to Table 1, found that the opinion on current situation of Accounting Administration System in basic education school, in overall, was in "Low" level. The problem of Accounting Administration System in basic education school, in overall, was in "High" level. The need for development of accounting administration system in basic school, in overall, was in "High" level.

The opinion of school administrators, and accounting practitioners in secondary education, the internal auditors of the secondary educational service area office.

Table 2. The analysis of current situation, problem, and need for accounting administration in basic education school, under the basic educational commission, in overall

School Accounting Administration	Current Situation			Problem			Need		
	X	SD	Level	X	SD	Level	X	SD	Level
1. Input Factor	2.91	0.24	Moderate	3.99	0.17	High	4.13	0.16	High
2. Process	2.44	0.23	Low	4.01	0.19	High	4.00	0.19	High
3. Outputs	2.28	0.37	Low	3.31	0.37	High	4.07	0.39	High
4. Outcomes	2.54	0.28	Moderate	3.99	0.27	High	4.26	0.24	High
5. Feedbacks	2.33	0.36	Low	3.91	0.37	High	3.79	0.36	High
Overall	2.50	0.13	Low	3.94	0.37	High	4.05	0.13	High

According to Table 2, found that the level of opinion on current situation of the accounting administration system in basic education school, in overall, was in "Low" level. The problem of accounting administration system in

basic education school, in overall, was in "High" level. The need for development of accounting administration system in basic education school, in overall, was in "High" level.

2) The accounting administration System in basic education school, under the Office of Basic Education Commission shown in following figures, consisted of 6 major factors, 16 sub-factors, and indicator in each sub-factor as follows: (1) the input factor consisted of 6 sub-factors, (2) the process consisted of 4 sub-factors, (3) the output consisted of 2 sub-factors, (4) the outcome consisted of 4 sub-factors, and (5) the feedback consisted of 1 sub-factor, as system shown in Figure 1 and sub-system shown in Figure 2-5

In this study, the research and development was administered as follows: The phase and step of study in process of research and development in accounting work management system of basic education school under the Office of Basic Education Commission as shown in Figure 2:

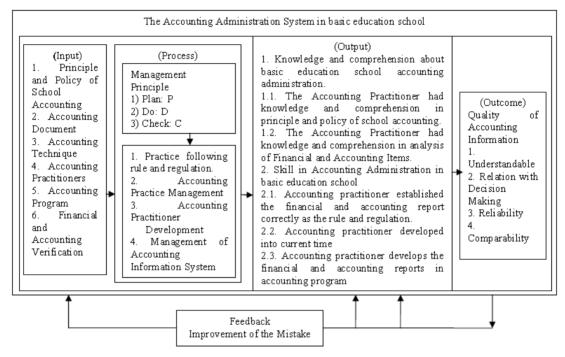


Figure 2. The accounting administration system in basic education school, under the office of basic education commission

According to Figure 2, the accounting administration system in basic education school, the accomplishment of product in school accounting administration, was be based on collaboration from each factor. The process included Subsystem Units by brining the appropriate resource, and use it costly.

The School Accounting Administration consisted of working through all of 4 sub systems, as shown in Figure 3-6 as follows:

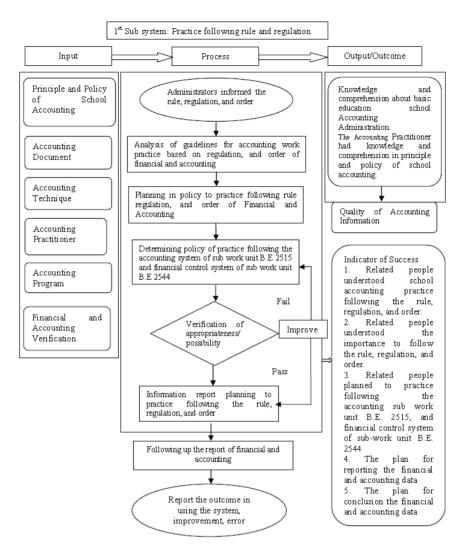


Figure 3. 1st sub system: process and practice following the rule, regulation, and order

According to Figure 3, the Sub-system Unit 1, practice following rule, regulation, and order consisted of the Input, Process, Output, and Outcome. The findings of work practice following the rule, regulation, and order consisted of 5 indicators of success.

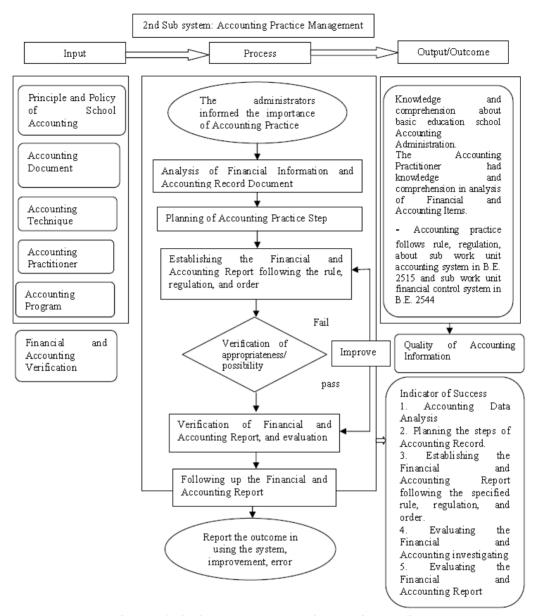


Figure 4. 2nd sub system: process and accounting practice

According to Figure 4, 2nd Sub system, the accounting practice management consisted of the Input, Process, Output, and Outcome. The findings of accounting practice management consisted of 5 indicators of success.

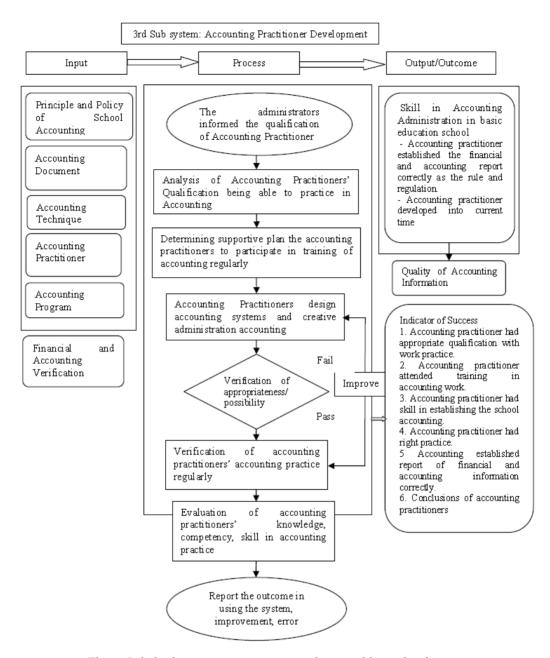


Figure 5. 3rd sub system: process, accounting practitioner development

According to Figure 5, 3rd Sub system, accounting practitioner practice, consisted of the Input, Process, Output, and Outcome. The findings of accounting practice consisted of 6 indicators of success.

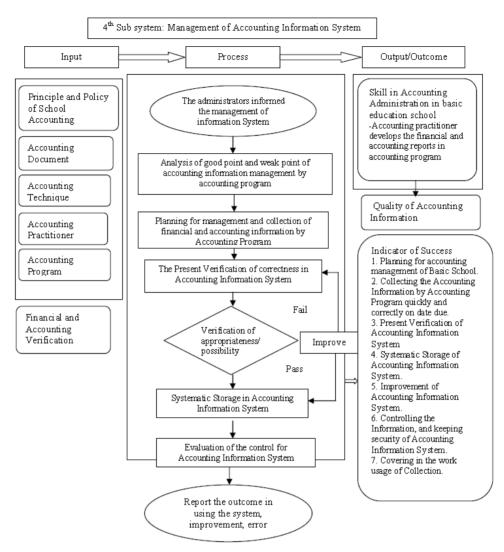


Figure 6. 4th sub system, process, and management of accounting information system

According to Figure 6, 4<sup>th</sup> Sub system, management of accounting information system, consisted of the Input, Process, Output, and Outcome. The findings of accounting practice consisted of 7 indicators of success.

3) The findings in evaluation after using the system found that: (1) the average value in opinion of school administrators, the accounting practitioners, the financial and accounting auditors, their comprehension in the accounting management practice, was higher than before providing the workshop at .01 significant level, (2) the average value for evaluating the competency in accounting administration in Basic Education School, after using the system, was higher than before using the system at .01 significant level, (3) the opinion on the appropriateness in work practice of major factors in the accounting administration system, Basic School, in overall, was in "High" level. In sub-factors, in overall, was in "the Highest" level, (4) the average value in satisfaction of the school administrators, and the accounting practitioners on the usefulness, the possibility in real practice, the appropriateness, the correctness, in overall, was in "High" level, (5) the average value in satisfaction of the school administrators, and the accounting practitioners on the accounting management in basic education school, in overall, was in "High" level, and (6) the average value in satisfaction of the school administrators, and the accounting practitioners, the financial and accounting auditors, the internal auditors of the educational service area office, on the quality of accounting information, in overall, was in "High" level.

# 4. Research Conclusion

According to the research findings of this study, accounting administration system in basic education school, under the Office of Basic Education Commission, which was appropriate and available to be used in real practice, was obtained. It could solve the problem, and was the system congruent with rule, regulation, and order of

school accounting management, related theoretical approach, and served the need of users in using the accounting management system in basic education school. So, this system should be used in the accounting management in basic education school.

## 5. Research Discussions

According to this research study, the interesting information should be discussed as follows:

- 1) For current situation, problem, and need for accounting administration system in Basic School, both of Primary School, and Secondary School, found that in overall, the implementation of current situation was in "Low" level. For the problem and need, were in "High" level. The Factor with the highest level of problem was the accounting practitioners who didn't understand the accounting principle as well as policy of school. (Kamsamer, 2011, p. 59-61) Most of them including the problems of work practice didn't follow the rule, regulation, and order. In addition, the report of financial and accounting information wasn't on time. It was caused by the accounting practitioners didn't follow the specified rule which was supported by Kwanreun Roongtan (2010, p. 66), the information establishment wasn't up to date, and the withdrawal in supportive budget wasn't correct as supported by Wichien Surin (2007, p. 97), the accounting officers established the evidence in money withdrawal incorrectly and untimely, there was no control and verification truly leading to the financial and accounting practice were not efficient.
- 2) For the accounting administration system in basic education school, found that it was comprised of 2 parts. Part 1: the major factor, consisted of 5 major factors including the Input, Process, Product, Outcome, and Feedback. Part 2: the major factor in each aspect consisted of 17 sub-factors including the details in work practice of sub-factors as supported by Smith (1982, p. 33), the management of different parts in each factor to be organized as well as associated which was supported by research findings of Ganjana Wisedrintong (2011, p. 421) including the details of guidelines in work practice of sub-factors. Since the characteristic of factor management in these systems, was to view the association of whole system as Von's (1968, p. 42-43) approach in systematic thinking which caused by the accounting administration process, participation in work management which was supported by Boonme Jamjit (2010, p. 84) by using the strategy in creative participatory conference AIC, and monitoring as well as following up as supported by Nitiwat Setteme (2007, p. 98-103) result, the accounting practitioners were enthusiastic and attentive to practice correctly following the rule as well as regulation, and timely. In addition, the workshop could provide financial and accounting officers the knowledge and comprehension in their work practice regulation more precisely which was supported by A-nong Yongtaisong's (2010, p. 78) the financial work practice was correctly following the rule and regulation, quickly, and modernly based on regulation of Ministry of Finance. (Department of Education, 2001, p. 4-21) The handbook for financial and accounting practice, should be established for being used a guideline in financial work practice efficiently.
- 3) The findings of evaluation in the satisfaction in using the accounting administration system in basic education school, under the Office of Basic Education Commission. The school administrators and accounting work practitioners, had satisfaction on the accounting administration system in basic education school regarding to: the usefulness; the developed system could serve the need to use the school accounting administration, and be useful for developing the accounting management. Consequently, the teachers as accounting practitioners could be able to do the accounting list correctly, lower down the accounting practice time. So, they had more time for teaching which was supported by Samran Koonpate (2010, p. 116) The teachers did not only have direct responsibility in learning and teaching, but also the duty in financial and accounting supporting the instructional activity management of school efficiently. (The Office of Basic School Commission, 2008, p. 1) The system searching, the system analysis, the system design, the usage and maintenance, and the system reviewing by using the strategic development as AIC, the best practice studying, and the monitoring as well as following up, found that the receive and paying in money were correctly and quickly. The loan money paying was more quickly than former time. The service users were satisfied in: the money keeping could be able to practice under power of lawful keeping, the budget withdrawing and paying was practiced following the specify rule of Ministry of Finance, the rule in withdrawing and paying money from the treasury, the money keeping, and the money sending 2008, and following the regulation for controlling money of sub-work unit 2001 was supported by Mirdick and Rose' (1977, p. 11) approach, the system was the process of development, searching for, the administrators' need in information, both of the system management, and system would be useful for those who would receive. The appropriateness for developing the system of school accounting administration system, could serve the need for using in management. The correctness of accounting administration system in school, the management technique could be used correctly. Furthermore, using this system in quantitative data analysis relating to the financial and accounting numbers which could lead to the quality report of financial and

accounting information.

## 6. Research Recommendations

- 6.1 Recommendations from This Research
- 1) For research study, should ask for cooperation from the school using the financial work management system. Before conducting the research, the school administrators, and accounting work practitioners should understand the necessity in do the accounting correctly based on the rule and regulation for acceptance before using the accounting work management system.
- 2) In this study, the researcher hold the training in rule, regulation, and order of finance and accounting, found that the accounting practitioners had little knowledge and comprehension in the accounting work. So, the school administrators should give an importance in developing the work practitioners to obtain knowledge, comprehension, and skill in financial and accounting work system.
- 6.2 Recommendations for Future Research Study
- 1) The research for studying in "Development of Internal Work Control System relating to Financial, Accounting, and Supply," should be conducted for controlling the work practice of financial, accounting, and supply of school.
- 2) The research for studying in "Development of the Financial, Accounting, and Supply Program System," should be conducted by developing the program associating with data collection for reporting the information quickly which could be sued in supply, financial, and accounting in order to decrease the problem in the mistaken and repetition.

#### References

- Department of General Education. (n. d.). Financial, Accounting, and Supply Work Management. Bangkok: Sema-dharma.
- Jamjit, B. (2010). The Development of Financial and Accounting System, Boongka-wittayakom suksa School, Lerng-nog-ta District, Yasoton Province. Master of Education Thesis, Mahasarakam University.
- Kamsamoeu, L. (2011). A Study of Problems in Financial and Accounting Practitioners of School, under Ra-yong Educational Service Area Office. Master of Education Thesis, Chantaburi:Rampaipannee Rajabhat University.
- Kietkrajai, M., & Srijanpech, S. (n. d.). Accounting Theories (10th ed.). Bangkok: T. P. N. Press Co. ltd.
- Koonpate, S. (2010). *The Development of Financial and Accounting System, Pa-ob Na Nakon 1 School, Posai District, Ubonrachatani Province.* Master of Education Thesis, Mahasarakam: Mahasarakam University.
- Mirabile, R. J. (1997, August). Everything You Want to Know About Competency Modeling. *Training and Development*, 13(1), 25-46.
- Pongpid, T. (2001). The Development of Financial and Accounting System, Toongfon-pattana-Suksa School, Toongfon District, Udontani Province. Master of Education Thesis, Mahasarakam University.
- Poojaroen, W. (n. d.). Guidelines for Internal Quality Assurance of School. Bangkok: Pimdee.
- Priebjariyawat, A. (2006, January). *Accounting Standard: Important Material and Example in Information Revealing* (1st ed.). Bangkok: J. S. T Publishing Co. ltd.
- Roongtal, K. (2010). The Development of Accounting Management System, Ban-bu-da-ho School, Konburi District, Nakonrachasima Province. Master of Education Thesis inEducational Administration, Mahasarakam: Mahasarakam University.
- Sangwanloi, N. (2007). Basic Accounting 1. Bangkok: Academic Promottion Center.
- Sanhou, S. (2010). *The Development of Financial and Accounting System, Ban-ta-sa-ad School, Seka District, Nongkai Province.* Master of Education Thesis, Mahasarakam: Mahasarakam University.
- Setteme, N. (2007). *The Development of Financial and Accounting System, Bandonreau School, Pochai District, Roi-ed Province.* Master of Education Thesis, Mahasarakam: Mahasarakam University.
- Sirisuthi, C. (2007). *Instructional Document in Educational Quality Control Course*. Mahasarakam: Mahasarakam University.
- Smith, W. (1982). Management systems: Analysis and application. Japan: CBS College publishing.

- Sokovic, M., Pavletic, D., & Pipan, K. (2010). Quality Improvement Methodologies PDCA Cycle, RADAR Matrix, DMAIC and DFSS. *Journal of Achievements in Materials and Manufacturing Engineering*, 43(1), 476-483.
- The Association of Accountant and Certified Auditors of Thailand. (2004). *Accounting Standard* (5th ed.). Bangkok: T. A Living.
- The Comptroller General's Department. (1996). *Handbook of Official and Sub-unit Work Accounting*. Bangkok: Dharamasan.
- The Office of Basic Education Commission. (2001a). Accounting Handbook for Sub-work Unit 1972. Bangkok.
- The Office of Basic Education Commission. (2001b). The Handbook for Internal Audit in School: Financial Control System of Sub-work Unit 2001. Bangkok.
- The Office of National Buddhism. (2006). Practice Guidelines for Educational Management of Juristic Person School under the Educational Service Area Office, the Office of Basic Educational Commission. Bangkok.
- The Office of National Buddhism. (2008). The Agriculture Cooperative Association of Thailand. Bangkok.
- Von Bertaianffy, L. (1968). General system theory. New York: George Braziller.
- Wichien, S. (2007). The Development of Financial and Accounting System, Nakonrachasima Educational Service Area Office 4, Nakonrachasima Province. Master of Education Thesis, Mahasarakam: Mahasarakam University.
- Wisedrintong, G. (n. d.). The Development of Classroom Management System for the Educational Extension School. Doctor of Educational Thesis, Mahasarakam University.
- Yongtaisaon, A. (2010). The Development of Financial and Accounting System, Toomyaiwittaya Koomuang District, Buriram Province. Master of Education Thesis, Mahasarakam: Mahasarakam University.

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