The Model and Mechanism for Applying Best Practices from Professional Development Activities to Enhance the Quality of Educational Management in a Whole-School Development Approach in the Context of Songkhla Province

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Abstract
This research aimed to 1) explore best practices in developing learners' competencies and educational personnel by synthesizing knowledge from professional development activities conducted by the Secretariat Office of the Teachers' Council of Thailand, and 2) develop models and mechanisms to apply this knowledge to enhance the quality of educational management in the context of Songkhla province. The sample included a group of developed schools: Tesaban 3 School (Wat Sala Huay Yang) and Ban Bo It School; and a group of co-developed schools: Tesaban 1 School (Thanon Nakhon Nok) and Ban Dan Community School. The research tools comprised a selection form for best practices in competency development and an evaluation form for the models and mechanisms. Data were analyzed using mean, standard deviation, and content analysis. The results showed that 1) Developed schools utilized innovative learning activity sets and active learning to develop reading and writing skills, while co-developed schools employed the 4-step skill ladder, both with very good results, and 2) The model and mechanism for applying knowledge from best practices in professional development activities are able to improve the overall quality of education in schools included the BOIT Model for Ban Bo I School, the SMART Model for Tesaban3 (Wat Sala Huay Yang) School, the BANDAN Model for Ban Dan Community School, and the PIER Model for Tesaban1 (Thanon Nakhon Nok) School. The evaluation indicated that all four models were highly appropriate.
Keywords: Formats and Mechanisms, Bringing Knowledge, Good Practices, Professional Development Activities, Educational Quality Development

Introduction

Education management in the present era is part of the global changes that impact Thai society in every aspect. It is essential to adapt quickly in order to overcome changes that no sector can deny, including in society, economy, science, and technology. As a result, the form of education management to prepare individuals for society needs to be adjusted to include diverse learning methods, various media, technologies, and content that enrich learners at every age. This applies to both formal and informal education, as well as lifelong learning.

The National Education Act of B.E. 2542, as amended (Act 2 in 2545 and Act 3 in 2553), specifies the direction of education management in Section 22, which emphasizes that all learners can learn and develop themselves. This means that learners are of utmost importance. The education process should encourage learners to develop naturally and to their full potential.

This is also linked to teachers and education personnel in Section 52, which directs the Ministry of Education to promote systems and processes for the production and development of teachers and education staff to ensure quality and standards suited to a high-level profession. This includes overseeing and coordinating with institutions responsible for training and developing teachers and education personnel to ensure they are prepared and strong in both new teacher training and the continuous development of existing staff.

The development of teachers and education personnel in the form of a Professional Learning Community (PLC) is an approach implemented in many countries that have quality education systems. Thailand has adopted this concept in designing activities for the development of teachers and education personnel. The Teachers' Council Secretariat has been using this approach to promote the development of teachers and education personnel since the fiscal year 2559 (2016) to the fiscal year 2563 (2020), in collaboration with private organizations such as Chevron Thailand Exploration and Production Ltd. and the STEM Education Center of the Southeast Asian Ministers of Education Organization (SEAMEO Secretariat). This model supports teachers and education personnel in creating a professional learning community at three levels: 1) individual level, 2) school level, and 3) network level, covering 8 key areas, as follows: 1. Digital Literacy & Computing (Digital technology understanding and computing); 2. Mathematics (Mathematics learning management) Science (Science learning management); 3. Early Childhood (Early childhood education management) Reading & Writing (Reading and writing skill development) School Reform (School reform) Vocational/ Occupational Training (Vocational training) Life Skills (Life skills and desirable characteristics).

The educational management problems in Songkhla province reveal that the academic achievement at the district and provincial levels (O-NET) is higher than the national average. However, the quality of education in most schools differs, with prestigious schools having higher standards compared to general schools. The teaching and learning management lack effective supervision,

guidance, monitoring, and continuous evaluation at all levels. There is little collaboration between educational institutions to improve the quality of education, and there is a lack of integration of learning resources from various community agencies that would support teaching and learning. The participation of other sectors in educational management is limited. Small schools in Songkhla make up over 40% of all schools, and the spread of infectious diseases (COVID-19) has created significant obstacles to teaching and learning. Each school has implemented education management based on the Ministry of Education's policies, in five forms: On-site learning, On-Air learning, Online learning, On-demand learning, and On-hand learning. However, each school faces significant challenges, especially those in Songkhla. Based on a meeting of schools in the development group, including Ban Bo It School and Thesaban 3 School (Wat Sala Huan Yang), and schools in the collaborative development group, including Chumchon Ban Dan School and Thesaban 1 School (Nakhon Nok Road), it was found that the issue all four schools urgently wanted to address was the inability of students to read and write, or literacy. This aligns with the knowledge goal in the 8 areas, specifically item 5: Reading & Writing (Managing or developing skills in reading and writing). The research team recognizes the importance of developing literacy skills, so they introduced an innovation from the Teachers' Council by selecting the best practice of Khun Kru Kamphan Tulakan, a teacher at Ban Nong Phak Waen School, Sa Kaeo District. The best practice consists of a set of learning activities and Active Learning methods to develop reading and writing skills. The steps include. Step 1: Warm-up, Step 2: Presenting knowledge, Step 3: Hands-on learning - practice and training, Step 4: Summary, Step 5: Applying knowledge. These methods were implemented in the schools in the development group. At the same time, for the development of literacy in the schools in the collaborative development group, the research team used an independent innovation, the "4-Step Ladder Skills" of Siwakarn Patoommasoot (Patoommasoot, 2011), which is an innovation aimed at developing reading and writing skills. The steps include: Step 1: Letter-sound matching, Step 2: Reading words

and word groups, Step 3: Handwriting practice, Step 4: Writing by dictation. The research team applied both innovations to develop students' literacy in the schools in both the development and collaborative development groups. Therefore, with the support and collaboration from the Teachers' Council Secretariat, Chevron Thailand Exploration and Production Ltd., and the STEM Education Center of the Southeast Asian Ministers of Education Organization (SEAMEO Secretariat), the research team from Thaksin University has implemented models and mechanisms to apply knowledge from best practices in improving student competencies, teacher development, and education personnel. This approach, derived from synthesizing knowledge from professional development activities by the Teachers' Council Secretariat, was applied to improve the quality of education in Songkhla province through a systemic development approach in schools.

Research Objective
- To investigate the best practices in developing student competencies, teacher competencies, and educational personnel, as derived from synthesizing knowledge in the implementation of professional development activities by the Teachers' Council Secretariat.
- To develop a model and mechanism for applying knowledge from best practices in professional development activities to improve the quality of education through a comprehensive development model in schools within the context of Songkhla Province.

Related Research
The Concept of Whole School Approach for Educational Quality Development

The concept of Whole School Approach refers to the systematic development of schools through the involvement of all stakeholders within the school (school administrators, teachers, and staff), as well as the subtle participation of parents and guardians, to enhance the quality of learning, characteristics, and behaviors of students. This is accomplished through three main missions: (1) Management, which includes data analysis, planning, implementing plans, and evaluating outcomes, (2) Teaching and learning management, which covers curriculum design and extracurricular activities, and (3) Support for the learning environment and related resources that facilitate student learning. This results in changes in four components as follows (Intawong, 2022).

New Normal Schools refers to the transformation of a school into a learning organization with a shared goal of enhancing educational quality. School administrators and teachers exhibit academic leadership, embrace lifelong learning, and cultivate a team-oriented organizational culture based on systematic and democratic work principles. The school operates with a quality management system and an information exchange system that is dynamic and adaptable. Additionally, it implements projects that support effective management and fosters a learning-conducive environment.

Professional Teachers refers to a transformation in their roles by designing student-centered learning processes that emphasize critical thinking, hands-on practice, and real-world application of knowledge. Instead of merely delivering information, teachers act as facilitators, guiding students toward self-directed learning. They instill moral values, positive attitudes, and desirable characteristics while treating students with respect, equality, and fairness. Teachers also implement assessment and evaluation methods that support student development, taking into account diverse learning needs.

Learning networks represent collaborative efforts between individuals and organizations both within and outside the school. These networks include school partnerships, individual connections, local wisdom experts, families, communities, businesses, social institutions, government agencies, private organizations, and local administrative bodies that voluntarily support education, either formally or informally. These collaborations facilitate knowledge exchange, shared experiences, and continuous joint learning activities.

Quality students are the ultimate outcome of systemic school transformation. This transformation consists of three key elements: educational equity, essential skills, and moral-ethical values. Educational equity ensures that all students have the right to access quality education fairly and inclusively, receiving appropriate support and care.

Essential skills refer to the 21st-century skills that students need for academic and career success, including critical thinking, problem-solving, creativity, communication, career skills, and life skills. Moral and ethical values involve fostering desirable character traits, such as discipline, honesty, and social responsibility. By implementing this approach thoughtfully and comprehensively, schools can achieve sustainable growth and development through active participation and shared responsibility from all stakeholders within the organization.

Professional Learning Communities (PLC)

A Professional Learning Community (PLC) is a collaborative process in which teachers, administrators, and educational personnel work together continuously to improve teaching and learning with the goal of enhancing instructional effectiveness and student outcomes (Dufour et al., 2016; Hord, 1997). This process fosters a culture of shared learning and collaboration, where members develop a shared vision, exchange academic knowledge, innovations, and professional teaching techniques, leading to transformative changes that enhance teachers' capabilities and maximize student learning potential (Pewdum, 2021). Setting clear objectives for PLCs is a crucial step in determining the direction and nature of activities within the community. This involves selecting key areas for development and aligning work plans with student learning objectives. The evaluation and improvement of PLC activities must be an ongoing process to ensure structured knowledge-sharing and collaboration. Real student learning data should serve as the foundation for refining PLC structures and activities (Dufour et al., 2016). A Professional Learning Community (PLC) is an effective tool for enhancing educational quality. By integrating PLC concepts and experiences into school management and instructional development, student learning can be improved in a systematic and sustainable way, supporting the advancement of education in Thailand.

Knowledge Development through Professional Learning Communities (PLC) by the Teachers' Council of Thailand

The Secretariat Office of the Teachers' Council of Thailand has implemented Professional Learning Community (PLC) activities to support professional development. The PLC model consists of five key characteristics: 1) shared values and norms 2) Collective focus on student learning 3) Collaboration 4) Expert advice and study visits 5) Reflection dialogue to enhance sustainable professional and educational quality. Additionally, the Teachers' Council of Thailand has collaborated with Chevron Thailand Exploration and Production, Ltd. and the Southeast Asian Ministers of Education Organization Secretariat (SEAMEO Secretariat) to promote teacher and educational personnel development. This initiative supports the establishment of PLCs at three levels: 1) Individual level, 2) Institutional (school) level, 3) Network level, The PLC initiative focuses on eight key areas of knowledge development: 1) Digital Literacy & Computing – Enhancing digital literacy and computational thinking skills. 2)Mathematics – Improving mathematics instruction and learning strategies.3) Science – Enhancing science education and pedagogical approaches.4) Early Childhood Education – Developing effective teaching strategies for early childhood learning.5) Reading & Writing – Strengthening literacy development and teaching methodologies. 6)School Reform (reorganize school), 7) Vocational/Occupational Training – (career training). 8) Life Skills – Promoting essential life skills and desirable character traits in students.

Research Conceptual Framework

This study explores best practices in professional development activities within educational institutions and applies the acquired knowledge and experiences to enhance the quality of educational management through a whole-school development approach in Songkhla province. The study also aims to propose an operational framework that integrates effective concepts and experiences into school-level education management.

The research conceptual framework includes theoretical frameworks as Participatory Action

Research (PAR), Design-Based Implementation Research, Competency-Based Learning, Whole School Approach, Professional Learning Communities (PLC), and Coaching and Mentoring, as illustrated in Figure 1.

Figure 1 Research Framework

Research Methodology
Population and Sample Group

This research is an experimental study employing a randomized Solomon four-group design. The sample was divided into four equal groups: two experimental groups and two control groups. Randomization was used to ensure that each participant had an equal chance of being assigned to any of the groups. The experiment was conducted simultaneously across all groups according to the predefined experimental protocol to ensure that confounding variables and other potential issues were fully controlled. Upon completion of the experiment, the results from all four groups were compared, and conclusions were drawn based on the established hypotheses.

Target Population and School Selection Criteria

This research focused on educational institutions in Songkhla Province, selecting a total of four schools: two experimental schools and two control schools. The selection of experimental and control schools was based on the following criteria:1. Similarity in Educational Context: The selected schools had to exhibit similar physical characteristics, school size, and curriculum to minimize variability that could affect the experimental outcomes.2.Comparable Academic Achievement Levels: The chosen schools needed to have students with comparable academic achievement levels based on previous assessments, ensuring that the experimental results clearly reflected the influence of the independent variable.3.Voluntary

Participation: Schools participating in the project had to voluntarily agree to join the experiment and cooperate fully in implementing the research plan. 4. Readiness of Personnel and Resources: The schools had to demonstrate readiness in terms of personnel capable of supporting the experiment and sufficient resources to carry out the research according to the plan.

Research Instruments

The research utilized two sets of instruments, which were evaluated for quality by five experts as follows:

Best Practice Selection Questionnaire focused on student competency development, teacher competency development, and educational personnel development. It is a four-point rating scale assessment based on a synthesis of knowledge from the Secretariat Office of the Teachers' Council of Thailand. The instrument's Item-Objective Congruence (IOC) index ranged from 0.50 to 1.00, ensuring its validity.

Evaluation Form on the Appropriateness of the Model and Mechanisms for competency development assessed four key aspects: utility, feasibility, propriety, accuracy. The instrument met the quality standard with an IOC index ranging from 0.50 to 1.00, indicating content validity and suitability for measuring the studied variables (Gronlund, 1985).

Data Collection

This study was conducted during the second semester of the 2022 academic year and followed these steps:

Study of Best Practices in Competency Development, the research team synthesized knowledge from professional development activities of the Secretariat Office of the Teachers' Council of Thailand to identify best practices in student, teacher, and educational personnel competency development.

- The research team collaborated with school administrators and teachers from all four schools to analyze key issues requiring student development at the institutional level.
- The team selected best practices from the educational knowledge management system of the Secretariat Office of the Teachers' Council

of Thailand. These included relevant educational knowledge and innovations, such as: Active Learning Strategies to enhance reading and writing skills among students, developed by Khamphan Tulakan and The Four-Step Ladder Skills Model by Patoommasoot (2011).

Development of a Model and Mechanism for Applying Best Practices in Professional Development to Improve Educational Quality. This aimed to implement a whole-school development approach tailored to the context of Songkhla Province.

- Developing a model and mechanism for integrating best practices into teacher-administrator collaboration within schools, incorporating Professional Learning Communities (PLC).
- Evaluating the appropriateness and alignment of the developed model and mechanism with student development goals, assessed by subject-matter experts.
- Refining and improving the model and mechanism for both the experimental and control groups before implementation.

Research Results and Discussion

Results of the Study on Best Practices in Competency Development for Students, Teachers, and Educational Personnel. The study analyzed the context, problems, and needs of schools in developing competencies for students, teachers, school administrators, and educational personnel. The findings revealed that all four schools faced the same issue: students had difficulty in reading and writing. This was identified as a critical issue that needed urgent attention since reading and writing skills are fundamental and affect learning in other subjects. The schools involved in the development, namely Ban Bo It School and Thetsaban 3 School (Wat Sala Huay Yang), adopted best practices derived from the knowledge synthesized from the professional development activities of the Secretariat Office of the Teachers' Council of Thailand. Specifically, they implemented Active Learning innovations to improve students' reading and writing skills. Additionally, Ban Nong Phak Waen School from the Sra Kaew Primary Education Service

Area presented teaching media and innovations to develop students' literacy through the Brain-Based Learning (BBL) process. The BBL method consists of five steps: Step 1: Warm-up: This step prepares students for learning by stimulating their readiness and making them feel comfortable and happy, enhancing their focus for the upcoming learning session. Step 2: Present: In this step, new content is introduced using real objects, picture cards, and word cards relevant to the lesson. Students engage in activities like reading along with the teacher, reading together as a class, working in pairs, and reading individually. Step 3: Learn Practice: This step involves students practicing group activities together, reading aloud as a group, pairing up for reading, and reading individually. Step 4: Summary: At this stage, students reflect on what they've learned. Group representatives present their work, and everyone provides feedback and participates in evaluating other groups' work. The teacher and students summarize the main ideas together. Step 5: Apply: This final step encourages students to apply what they've learned, such as writing sentences, creating new words, and composing stories based on their imagination, aligned with the lesson content as table 1.

Based on Table 1, the results of selecting best practices as an innovation for Active Learning activities and teaching methods to develop reading and writing skills for students by Teacher Kamphan Tulagan are at a "Very Good" level. Innovation has a high possibility of being applied in teaching and learning to improve students' literacy skills. The results show that Ban Bo It School has an average score of 2.97 across all criteria, which falls into the "Very Good" level, while Thetsaban 3 (Wat Sala Hua Yang) has an average score of 3.00, also at the "Very Good" level.

As for the schools in the development group, namely Chumchon Ban Dan School and Thetsaban 1 (Nakhon Nok Road), they have chosen to implement the "Four-Step Ladder Skill" innovation by Siwakan Patumsuti to develop reading and writing competencies. The four steps include: Spell words, Read words and phrases, Practice handwriting and Write according to dictation according to table 2.

Table 1 Mean and Standard Deviation of the Selection of Best Practices as an Innovation for Active Learning Activities and Teaching Methods to Develop Reading and Writing Skills for Students by Teacher Kamphan Tulagan

Topics	Ban Borit School (N=9)			Tesabal 3 School (Wat Sala Hua Yang) (N=49)		
	μ	σ	Quality level	μ	σ	Quality level
Alignment with student issues/needs for development across the school	3.00	0.00	excellent	3.00	0.00	excellent
The innovation is complete and clear, and can be implemented	3.00	0.00	excellent	3.00	0.00	excellent
Readiness of the school's resources to apply the innovation	3.00	0.00	excellent	3.00	0.00	excellent
mean ($\bar{X}$)	2.94	0.13	excellent	3.00	0.00	excellent

Note: The quality level scoring criteria are divided into 4 levels (Level 0 means Needs Improvement, Level 1 means Satisfactory, Level 2 means Good, and Level 3 means excellent)

Table 2 Average and Standard Deviation for the Selection of the Four-Step Ladder Skill Innovation

Topics	Chumchon Ban Dan School (N = 11)			Thetsaban 1 School (Thanon Nakhon Nok) (N = 50)		
	μ	σ	Quality level	μ	σ	Quality level
Alignment with student issues/needs for development across the school	3.00	0.00	excellent	3.00	0.00	excellent
The innovation is complete and clear, and can be implemented	3.00	0.00	excellent	3.00	0.00	excellent
Readiness of the school's resources to apply the innovation	3.00	0.00	excellent	3.00	0.00	excellent
mean ($\bar{X}$)	3.00	0.00	excellent	3.00	0.00	excellent

Note: The quality rating criteria have four levels (Level 0 means improvement is needed, Level 1 means satisfactory, Level 2 means good, Level 3 means excellent)

From Table 2, the selection results for the Four-Step Ladder Skill Innovation are rated as excellent. This innovation has a high potential for use in teaching and learning to improve students' reading and writing skills. It was found that Chumchon Ban Dan School and Thetsaban 1 School (Thanon Nakhon Nok) had an average score of 3.00, which is classified as excellent.

It can be observed that the development schools selected best practices from the Teachers' Council of Thailand to address issues in reading and writing skills. One of the selected innovations was the Active Learning approach by Teacher Kampan Tulakan, which emphasizes a learner-centered approach with five steps: 1) Warm-up 2) Present 3) Learn & Practice 4) Summary 5) Apply – Applying knowledge creatively, such as sentence construction or storytelling. This approach is adapted from the Brain-Based Learning (BBL) five-step model. For the collaborative schools, the Four-Step Ladder Skill Innovation was selected, consisting of the following steps: 1) Practicing phonics 2) Reading words, phrases, and stories 3) Handwriting practice 4) Dictation writing. The selected innovations share similar fundamental processes, emphasizing systematic phonics instruction and step-by-step guided spelling practice. This approach ensures that students develop reading and writing fluency effectively. The selected approach aligns with research by Jantasok and Tesana (2021), which studied reading and spelling skill development among Grade 6 students using skill exercises combined with BBL. Their study showed that the lesson plans exceeded the effectiveness benchmark (80/80), achieving scores of 82.07/80.86. The students' progress index reached 46.39%, and their

satisfaction with the activities was high (average score of 4.61 out of 5). This indicates the success of integrating BBL with skill-based exercises to enhance Thai language proficiency and student engagement.

Additionally, Khonwai et al. (2022) studied spelling skill development in Grade 1 students using BBL-based learning activities combined with skill exercises. Their study found that students who learned through BBL-integrated methods demonstrated significant improvement in spelling skills, with post-learning performance significantly higher than pre-learning levels at $p < 0.05$. Student satisfaction with BBL-based learning was also high ($\bar{X} = 2.71$, S.D. = 0.06). These studies highlight the necessity of explicit phonics instruction in early Thai language education. Without phonics-based spelling instruction, students lack foundational word formation skills. Teaching phonics systematically enables students to decode and spell words independently. Additionally, handwriting practice and dictation exercises serve as foundational skills that lead to accurate and fluent writing.

Development of an Educational Management Model

As part of the development of a framework and mechanism for implementing best practice knowledge into professional development activities to enhance the overall quality of education in Songkhla Province, four schools analyzed and designed an educational management innovation model tailored to their school context. Among them, Ban Bo It School developed an educational management model and mechanism under the name BOIT Model, as illustrated in Figure 2.
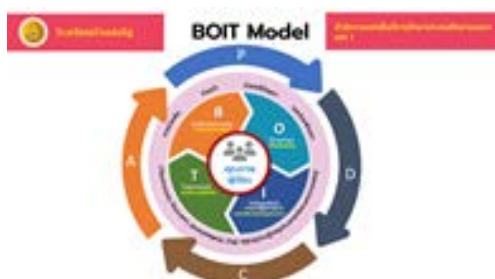
Figure 2 The BOIT Model for Educational Management Innovation

The BOIT Model consists of four key components: B (Brainstorming): Encourages collective idea generation by mobilizing all internal and external stakeholders. This process emphasizes participation and the development of a shared vision that aligns with the school's challenges, needs, and contextual realities. O (Oneness): Represents organizational unity across administration, academics, and school operations. It ensures that all elements function as a cohesive whole, preventing fragmentation and fostering a unified institutional approach. I (Integrated Management): Refers to integrated administration, incorporating participatory management involving all school stakeholders, including teachers, parents, school boards, and the community. T (Teamwork): Highlights collaborative teamwork, ensuring active participation from parents, teachers, school boards, the local community, and school administrators. This collective effort drives school development across all dimensions. Additionally, the BOIT Model is implemented through systematic management based on Deming's Quality Cycle (P-D-C-A): 1) Plan: Developing strategic plans 2) Do: Executing the planned strategies, 3) Check: Evaluating and monitoring progress, 4) Action: Making necessary adjustments and improvements. This model operates under the philosophy of "thinking together, acting together, solving problems together, and developing together" through the Professional Learning Community (PLC) approach. Meanwhile, Thetsaban 3 School (Wat Sala Huai Yang) has developed its own educational management innovation model, called the SMART Model, as illustrated in Figure 3.

Figure 3 The SMART Model for Educational Management Innovation

SMART School consists of: S: Sufficiency means implementing the principles of the Sufficiency Economy Philosophy. M: Management means having an efficient management process.

A: Academic means being a leader in academics, striving to improve students' learning outcomes to develop professional teachers. R: Relations mean promoting positive relationships with the community. T: Technology means utilizing technological innovations for effective learning management. SMART Teacher consists of: S: Search means continuously seeking knowledge and self-improvement to become a professional teacher. M: Mind means having the spirit of a teacher, demonstrating sacrifice and responsibility. A: Action means Implementing learning processes through PLC (Professional Learning Community). R: Research means conducting research to enhance student development. T: Technology means incorporating innovative media and technology into learning management. SMART Student consists of: S: Skill means possessing communication skills, teamwork skills, and knowledge-seeking skills. M: Moral means upholding morality, ethics, and virtue. A: Achievement means improving academic performance. R: Read (Reading, Writing, Arithmetic) means developing literacy, writing, and mathematical skills. T: Technology means using and being aware of technology effectively.

One of the schools that gather to develop consists of Chumchonbandan school has developed the model and mechanism of educational management innovation under the name BANDAN Model, as shown in Figure 4.

Figure 4 The Model and Mechanism of Educational Management Innovation under the name BANDAN

BANDAN Model consists of:B: Building Shared Vision means creating a shared vision among teachers, staff, school board members, and parents to achieve the students' goals of being good, capable,

and happy. A: Active Learning means promoting student-centered teaching and learning approaches. N: Networking Cooperation means establishing partnerships and collaboration with both community and external networks to mobilize various resources. D: Development means enhancing the quality of the organization by employing school-based management alongside good governance principles, while driving operations through the Deming cycle. A: Apply for Life Skills means Encouraging 21st-century skills, career skills, and life skills. N: Needs Assessment means evaluating the needs of stakeholders in education management for continuous development and improvement, based on the principles of co-thinking, co-solving, and co-developing through the Professional Learning Community (PLC).Additionally, Municipal School 1 (Thanon Nakorn Nok) has developed an educational administration innovation model called the PIER Model, as illustrated in Figure 5.
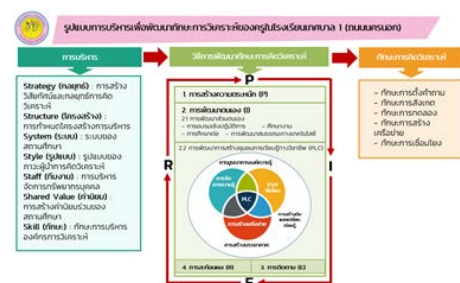
Figure 5 The Structure and Mechanism of the PIER Model for Educational Administration Innovation

Component 1 is administration. It refers to the administration principles for developing teachers' analytical thinking skills at Municipal School 1 (Thanon Nakorn Nok) are based on McKinsey's 7S Framework. This approach strengthens organizational unity, fosters close relationships between organizational and individual levels, reduces conflicts, promotes teamwork, and encourages a shared positive attitude toward organizational goals. The administrative principles consist of: 1) Strategy is establishing a clear and feasible vision and analytical thinking strategy that can be communicated across different departments under a shared goal. 2) Structure is implementing a flat organizational structure with participation from all

stakeholders, ensuring open communication to create an environment conducive to analytical thinking and network building. 3) System is developing an integrated school system that fosters analytical thinking, ensuring smooth interactions among all parties. The system includes ongoing supervision, assessment, rewards, recognition, knowledge management, and information dissemination. 4) Style is encouraging leadership in analytical thinking where administrators think outside the box within reasonable principles, serve as role models, and empower teams with trust and independence. 5) Staff is managing human resources by enhancing teachers' analytical thinking skills through diverse learning approaches, motivation, positive reinforcement, and analytical thinking competitions to celebrate achievements. 6) Shared Values is cultivating shared beliefs and values within the organization to drive enthusiasm and commitment toward analytical thinking development, fostering adaptability and innovation. 7) Skills focus on continuous professional development through collaborative learning, networking, and the integration of educational technology to enhance analytical thinking skills.

Component 2: Methods for Developing Teachers' Analytical Thinking Skills. The PIER Model adopts the P-D-C-A Quality Cycle (Plan-Do-Check-Act) for developing teachers' analytical thinking skills: Plan – Designing a development plan to raise awareness among teachers about the importance of analytical thinking and encouraging continuous self-improvement. Implement – Applying analytical thinking development methods in two main ways: 1. Self-Development contains 1) training programs, 2) study visits, 3) further education, and 4) enhancing technological competencies 2. Professional Learning Community (PLC) Development contains 1) knowledge management, 2) mentorship programs, 3) network building, 4) creating a learning environment, 5) knowledge integration, 6) team-based learning exchange. Evaluation is monitoring and assessing the progress of teachers' analytical thinking development. Reflect is reviewing the development outcomes to make continuous improvements.

Component 3: Analytical Thinking Skills based on research; teachers' analytical thinking skills include five key areas: 1) Questioning Skills, 2) Observation Skills, 3) Experimentation Skills, 4) Networking Skills, 5) Connection Skills. The PIER Model has been reviewed and validated by three experts, as shown in Table 3.

From Table 3, it is found that the model and mechanism for applying knowledge from best practices in professional development activities to improve the quality of educational management across the school in four areas: Utility, Feasibility, Propriety, and Accuracy are highly appropriate and feasible for implementation. However, the model and mechanisms should be improved based on the suggestions from the three experts.

Table 3 Analysis of the Model and Mechanism for Applying Knowledge from Best Practices in Professional Development Activities to Improve the Quality of Educational Management

Evaluation List	Developmental Schools		Collaborative Development Schools	
	Ban Bo It School	**Municipal School 3 (Wat Sala Huai Yang)**	**Ban Dan Community School**	**Municipal School 1**
Utility	The application of the PDCA approach and the experiences of renowned teachers in the school's context is highly beneficial and has great potential for further development and improvement.	The SMART Model is an approach that promotes comprehensive development across all dimensions at an advanced level.	The application of the PDCA cycle combined with skill development innovations enhances both students and educational personnel. However, clear implementation details should be specified to improve operational efficiency.	The application of McKinsey's 7S Framework and the PDCA cycle strengthens the administrative process, enhancing organizational efficiency and continuous improvement.

Feasibility	The proposed approach is practical and feasible if there is an in-depth study of the school's issues and the integration of the PLC process at all levels.	It is feasible, but the school's vision should be strengthened to drive the process in a systematic manner.	It has a high potential for success when literacy activities are combined with PLC to drive system-wide development. Studying the context and specific issues of the school before designing the model will help increase the chances of success.	It is feasible, but the connection between the organizational level and the individual level should be strengthened to reduce complexity and increase effectiveness.
Propriety	Integrating reading across all subjects through the PLC process helps create relevance and clarity in the development system, leading to more effective development.	Using PLC in conjunction with the Plan-Do-See-Reflect approach is highly appropriate and effective at achieving the desired outcomes.	It is highly suitable to integrate reading across all subjects, driven by the active involvement of both administrators and teachers. Additionally, a system should be designed to demonstrate the connection of components in order to achieve the set goals effectively.	It is suitable, but the origin of the key skills used should be explained, along with the development of concepts to create unity within the model.
Accuracy	The connection between PDCA and PLC should be clearly demonstrated, with the model details presented in a way that reflects the school's mission and goals.	The focus should be on developing students' learning outcomes based on teachers' actions, with clear guidelines for developing these outcomes.	Presenting clear diagrams and detailed explanations will help enhance understanding and clarity.	The integration of 7S and PDCA should be clearly defined, with results focusing on the development of student and teacher quality.

The four educational institutions have developed a step-by-step management model that aligns with the specific policies, vision, and direction of each school. This has led to diverse operational approaches, while still maintaining a shared mechanism considered a best practice, supported by the Office of the Teachers Council. This includes operating under the Professional Learning Community (PLC) concept, which is a key mechanism for driving the school system. The PLC concept focuses on creating spaces for teachers and educational personnel to interact constructively, exchange knowledge, reflect, and collaboratively develop professional skills, with the goal of enhancing student achievement and developing students in all dimensions.

A professional learning community brings together individuals in the same profession to develop professional competencies and the quality of students. This is achieved through collaborative learning, lesson learned, and sharing learning continuously. The PLC process follows a step-by-step method, which includes PLAN, DO, SEE, and REFLECT, done in three cycles. The PLC process benefits both teachers and students. For teachers, it helps reduce the feeling of isolation in their teaching, increases attachment to the mission and goals of the school, and for students, it leads to a reduction in grade repetition rates, fewer delays in learning progression, fewer absences, and a noticeable improvement in academic achievement in subjects like science, history, and reading, compared to traditional schools. Finally, there is a clear reduction in achievement gaps between students from different backgrounds (Vehachart, 2021).

Additionally, the development of the model used the systemic PDCA cycle framework, which supports successful school management, aligning with Luanrit's (2022) research. This research studied and developed a school management model to improve student quality by fostering schools as

learning communities. It was found that the school management framework for enhancing student quality through learning communities (SLC) consists of two main concepts: 1) building the school as a learning community (SLC), which includes vision, philosophy, and activity systems, with three components: cooperative learning in classrooms, building camaraderie among staff, and the PLC concept. 2) School management for improving student quality through SLC, including the PDCA cycle and educational resource management (4Ms). The evaluation results of this development model show a mean score ($\bar{x}$) of 4.40 or higher in terms of Utility, Feasibility, Propriety, and Accuracy

Conclusion

Findings on Best Practices in Developing Student Competencies, Teacher Competencies, and Educational Personnel: The study of best practices in the development of student competencies, teacher competencies, and educational personnel, based on the synthesized knowledge from professional development activities by the Office of the Teachers Council, found that schools in the development group used Active Learning learning activities and proactive learning management strategies to improve literacy skills. The schools in the collaborative development group implemented the 4-Step Skill Innovation and were rated at an excellent level.

The models and mechanisms for applying knowledge from best practices in professional development activities to improve the quality of education in a system-wide development approach in Songkhla Province include four models as follows: Development Group: 1) Ban Bo It School used the BOIT Model, 2) Municipal School 3 (Wat Sala Huay Yang) used the SMART Model and Co-Development Group: 1) Ban Dan Community School used the BANDAN Model 2) Municipal School 1 (Thanon Nakorn Nok) used the PIER Model.

Benefits of the Research

Best Practices for Enhancing Competencies: It provides valuable guidelines for improving student competencies, teacher development, and the overall capacity of educational staff based on a synthesis of knowledge from the professional development activities led by the Teacher Council Secretariat.

Models and Mechanisms for Knowledge Application: The research introduces practical models and mechanisms for applying best practices in developing student competencies, teacher skills, and staff capacities. These are useful for advancing the overall quality of education within schools in Songkhla Province.

Understanding the Impact: It reveals the outcomes of implementing these best practices in improving competencies across students, teachers, school administrators, and educational staff, all while aligning with national education standards.

Suggestions

School administrators, as leaders of the management mechanisms and systems in educational institutions, should effectively communicate the knowledge gained from synthesizing best practices in professional development activities by the Teachers Council. This information should be shared with all relevant stakeholders. It is crucial to translate this knowledge into concrete actions by incorporating it into policies or strategies that can be practically implemented.

The two innovative models presented in the research can be effectively utilized to prevent and resolve literacy issues. However, school administrators and Thai language teachers must ensure continuous efforts to address the factors affecting student literacy. These efforts should align with the learning management process to ensure sustainable, long-term improvements in literacy development.

Research should focus on literacy development, specifically using learning activity sets and Active Learning strategies to enhance reading and writing skills for students, using the methods of Khun Khru Kamphan Tulakan and the "4-Step Skill Ladder" by Siwakan Phatumsooti. This can be combined with multimedia resources such as songs, games, colored word cards, or using the "Four Vowel" method to facilitate understanding and learning.

Future research could also incorporate the use of the Wordwall application, allowing students to learn through play and engaging activities. Research Limitations.

Research Limitations

The research was conducted during the COVID-19 pandemic, which posed challenges in traveling to schools. Some schools suddenly closed due to students contracting the virus, resulting in the research plan not being fully implemented as scheduled.

The four schools involved are located in a multicultural society, with students and staff from different cultural backgrounds, including Thai Buddhists, Thai Muslims, and Thai Chinese. This cultural diversity led to more holidays based on traditions and customs, which exceeded the official public holidays, affecting the timely execution of the teaching activities as planned.

Due to the significant differences in religious beliefs among the students, communication barriers arose, making it difficult to effectively teach and facilitate interactions between students and teachers, as well as among peers.

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