

## Community-based student support system for improving primary education quality

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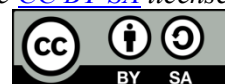
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### ABSTRACT

This research and development study aimed to: (1) examine current and desired conditions and priority needs for developing a community-based student support system in primary schools; (2) develop and validate the proposed model; (3) examine the effects of model implementation on teachers' knowledge and supervisory practices; and (4) evaluate the model's feasibility and usefulness from stakeholders' perspectives. The study was conducted in four phases. Phase 1 involved a needs assessment with 387 stakeholders. The findings indicated moderate current conditions and high desired conditions, with systematic student data management identified as the highest priority need. Phase 2 focused on model development and expert validation. The model received high to highest ratings for accuracy and appropriateness. Phase 3 implementation with 30 teachers revealed that posttest scores were significantly higher than pretest scores at the .05 level ( $p < .001$ ). Teachers' supervisory-related behaviors were rated at the highest level, and stakeholder satisfaction was high level. Phase 4 evaluation confirmed high feasibility and usefulness. The findings demonstrate that the developed model is conceptually sound, practically feasible, and effective in strengthening community-based student support mechanisms in primary education.

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## 1. INTRODUCTION

Improving the quality of primary education remains a central global priority, as foundational learning during early schooling significantly shapes long-term academic trajectories and socio-economic mobility (OECD, 2019; World Bank, 2018). Evidence consistently demonstrates that early mastery of literacy, numeracy, and socio-emotional competencies predicts sustained academic achievement and reduced educational inequality (UNESCO, 2020; UNICEF, 2021). Contemporary educational discourse has increasingly adopted a whole-child perspective, emphasizing that academic performance is inseparable from students' cognitive, emotional, and social development (Darling-Hammond et al., 2020; Taylor et al., 2017). However, international assessments continue to reveal persistent disparities in learning outcomes associated with socioeconomic background and contextual

factors beyond the classroom (OECD, 2023). These findings underscore the necessity of systemic approaches that extend beyond instructional improvement alone and address the broader ecological conditions influencing primary school learners.

In response to these multidimensional challenges, comprehensive student support systems have emerged as structured mechanisms designed to mitigate barriers to learning and promote equitable educational outcomes (Walsh et al., 2016; Child Trends, 2017). Integrated Student Support (ISS) frameworks coordinate academic, health, social, and family services to ensure that students' non-academic needs do not impede their learning progression (Maier et al., 2017; Moore et al., 2017). Empirical evaluations indicate that schools implementing systematic identification, referral, and case-management processes demonstrate improved attendance, stronger school engagement, and enhanced academic performance, particularly among vulnerable populations (Balfanz & Byrnes, 2018; National Center for Education Evaluation, 2021). Rather than functioning as peripheral services, student support systems are increasingly recognized as core institutional infrastructures that directly influence educational quality and student development.

Parallel to the expansion of student support systems, the community school movement has gained prominence as a collaborative strategy for educational improvement. Community-based school development integrates families, local organizations, and social service agencies into school governance and student support structures (Maier et al., 2017; Learning Policy Institute, 2023). Research demonstrates that such collaborative models contribute to improved academic outcomes, reduced absenteeism, and stronger school climate by leveraging community capital and shared accountability (Sanders, 2016; Valli et al., 2018). Furthermore, family and community engagement has been shown to enhance students' motivation, resilience, and behavioral outcomes (Epstein, 2018; OECD, 2020). By situating schools within broader social ecosystems, community-based approaches provide a sustainable framework for strengthening primary education quality through distributed leadership and networked support systems.

Despite policy initiatives in Thailand promoting student care systems and community participation in educational management, national assessments continue to reflect disparities in primary learning outcomes and persistent equity challenges (OECD, 2023; ONESQA, 2022). Existing Thai research has primarily examined components or operational conditions of student support systems rather than developing empirically tested, integrative models that systematically embed community-based structures within primary schools (Office of the Education Council, 2021; Srikham & Chantarasombat, 2019). Moreover, limited studies have rigorously evaluated the measurable impact of community-integrated support models on student quality indicators at the primary level (World Bank, 2021). This gap highlights the need for research that moves beyond descriptive analyses toward the development and validation of contextually grounded models capable of enhancing educational quality through structured community engagement mechanisms.

## 2. METHOD

This study employed a Research and Development (R&D) design to systematically construct, validate, and examine the effectiveness of a community-based student support system model for primary schools. The R&D process consisted of four sequential phases, integrating both qualitative and quantitative methods to ensure conceptual rigor and practical applicability.

### 2.1 Phase 1: Identification of Components and Needs Assessment

The first phase aimed to identify the core components and indicators of a community-based student support system appropriate for primary school contexts. A comprehensive review of relevant theories, national education policies, and empirical research was conducted to establish an initial conceptual framework. Based on this synthesis, a structured needs assessment instrument was developed and administered to school administrators and teachers. This research aimed to study (1) the current and the desired conditions, and (2) the needs for developing a community-based student support system to enhance the quality of primary school students in the Northeastern region of Thailand. The sample consisted of 387 participants, including school administrators, teachers, parents, school committee members, community leaders, and local administrative organization officers. The sample size was determined using the Krejcie and Morgan (1970) table, and stratified sampling was applied based on the educational service areas. The research instrument was a five-point Likert scale questionnaire. The

content validity of the instrument ranged from 0.80 to 1.00. The discrimination index for the desired condition ranged from .309 to .858, with a reliability coefficient of 0.970. For the current condition, the discrimination index ranged from .410 to .849, with a reliability coefficient of 0.973. The statistics used for data analysis included mean, standard deviation, and Modified Priority Needs Index (PNI<sub>modified</sub>).

## **2.2 Phase 2: Model Development and Expert Validation**

In the second phase, a preliminary model was developed based on the findings from Phase 1. The model was designed as a structured and integrated framework encompassing principles, components, operational processes, stakeholder roles, and evaluation mechanisms. To ensure theoretical soundness and contextual appropriateness, the model was submitted to a panel of nine experts in educational administration, student support systems, and educational research. The experts evaluated the model using structured assessment forms focusing on content validity, clarity of structure, appropriateness for primary school contexts, and feasibility of implementation. Quantitative ratings and qualitative feedback were collected. The evaluation results indicated high levels of agreement across all criteria. Recommendations from the experts were incorporated to refine and finalize the model prior to field implementation.

## **2.3 Phase 3: Implementation and Effectiveness Testing**

The third phase examined the effectiveness of the developed model through field implementation in a selected primary school. Thirty teachers participated in this phase. A one-group pretest–posttest design was employed to measure changes in teachers’ knowledge related to the student support system. Participants completed a knowledge test prior to implementation and again after the intervention period. In addition to knowledge assessment, behavioral evaluation was conducted to assess teachers’ practical application of the model. Observation checklists and self-report instruments were used to examine practices such as student monitoring, collaborative planning, data utilization, and coordination with community stakeholders. Furthermore, a satisfaction survey was administered to evaluate teachers’ perceptions regarding clarity, practicality, and overall usefulness of the model. Statistical analysis was conducted to compare pretest and posttest scores and to summarize behavioral and satisfaction outcomes, providing empirical evidence of model effectiveness.

## **2.4 Phase 4: Stakeholder Evaluation**

The final phase focused on assessing the broader applicability of the model from the perspectives of key stakeholders. Twenty-five stakeholders—including school administrators, teachers, and community representatives—participated in this evaluation. A structured assessment instrument was used to examine two primary dimensions: utility and feasibility of implementation. Descriptive statistical analysis was conducted to determine overall levels of agreement. The results provided additional validation regarding the practicality, scalability, and sustainability of the developed model within real school contexts.

# **3. RESULT AND DISCUSSION**

## **3.1 Identification of Components and Needs Assessment**

This phase presents the findings regarding the identification of key components and the assessment of current and desired conditions related to the development of a community-based student support system. The results highlight priority needs and provide an empirical foundation for constructing the initial model framework (Table 1).

Table 1 indicates that the overall current condition of the community-based student support system was rated at a moderate level ( $M = 3.12$ ,  $SD = 0.70$ ), whereas the desired condition was rated at a high level ( $M = 4.24$ ,  $SD = 0.55$ ), reflecting a clear development gap. The highest priority need, based on the priority needs index ( $PNI = 0.41$ ), was systematic management of student data. Other components showed moderate priority levels ( $PNI = 0.34$ – $0.36$ ), suggesting consistent needs across dimensions. These findings highlight the necessity for systematic improvement, particularly in student data management, to strengthen the overall support system.

Table 1. Identification of components and needs assessment

| Items                                                  | Current condition |      |          | Desired condition |      |       | PNI  | Rank |
|--------------------------------------------------------|-------------------|------|----------|-------------------|------|-------|------|------|
|                                                        | Mean              | SD   | Level    | Mean              | SD   | level |      |      |
| Systematic management of student data                  | 3.05              | 0.82 | Moderate | 4.31              | 0.58 | High  | 0.41 | 1    |
| Screening and monitoring of students' risk factors     | 3.12              | 0.76 | Moderate | 4.25              | 0.58 | High  | 0.36 | 2    |
| Continuous counseling and guidance services            | 3.15              | 0.67 | Moderate | 4.24              | 0.52 | High  | 0.35 | 3    |
| Targeted assistance and student development            | 3.13              | 0.77 | Moderate | 4.23              | 0.60 | High  | 0.35 | 3    |
| Family and community engagement                        | 3.11              | 0.76 | Moderate | 4.22              | 0.61 | High  | 0.35 | 3    |
| Establishment of educational networks and partnerships | 3.15              | 0.76 | Moderate | 4.21              | 0.59 | High  | 0.34 | 7    |
| Monitoring and evaluation of implementation            | 3.14              | 0.79 | Moderate | 4.23              | 0.59 | High  | 0.35 | 3    |
| Overall                                                | 3.12              | 0.70 | Moderate | 4.24              | 0.55 | High  | 0.36 | -    |

Screening and monitoring of students' risk factors (PNI = 0.36) and monitoring and evaluation of implementation (PNI = 0.36). Other components—including continuous counseling and guidance services, targeted assistance and student development, and establishment of educational networks and partnerships—also reflected substantial priority needs (PNI = 0.35). In contrast, family and community engagement showed the lowest priority need (PNI = 0.34), although it remained at a considerable level. Across all components, practical feasibility consistently remained at a moderate level, while practical usefulness was uniformly rated high. This discrepancy suggests that although the components are perceived as highly beneficial in practice, further development and capacity enhancement are required to improve their feasibility and effective implementation.

The highest priority need identified in this study—systematic management of student data—aligns with the growing emphasis on data-driven decision-making in education. Research has consistently demonstrated that effective use of student data enhances instructional planning, early intervention, and overall student outcomes (Datnow & Hubbard, 2016; Schildkamp, 2019). However, many schools struggle with technical capacity, data literacy, and organizational structures that support systematic data use. The moderate feasibility ratings in this study may therefore reflect gaps in digital competency and infrastructure, particularly in educational opportunity expansion schools located in regional contexts. Similarly, the high priority assigned to screening and monitoring of students' risk factors corresponds with frameworks such as the Multi-Tiered System of Supports (MTSS), which emphasizes early identification and targeted interventions (Sugai & Horner, 2002). Effective risk monitoring requires coordinated systems, interdisciplinary collaboration, and continuous data collection—conditions that may not yet be fully institutionalized in all schools. Monitoring and evaluation of implementation also emerged as a high-priority area. This finding is consistent with implementation science literature, which stresses that sustainable educational reform depends not only on program design but also on fidelity of implementation and continuous improvement processes (Fixsen et al., 2005). Without systematic evaluation mechanisms, even well-designed supervision models may fail to achieve long-term impact.

The consistently high ratings for practical usefulness across all components suggest that stakeholders clearly recognize the value of classroom-based supervision and support systems. This perception aligns with research indicating that collaborative supervision and instructional leadership significantly influence teacher effectiveness and student achievement (Hallinger, 2011; Robinson, Lloyd, & Rowe, 2008). In the digital era, such supervision must also incorporate technological pedagogical competencies to ensure alignment with contemporary learning demands (Koehler & Mishra, 2009). However, the moderate feasibility ratings imply structural and contextual challenges. These may include limited professional development opportunities, insufficient digital infrastructure, or

workload constraints. The digital transformation of schools requires not only policy direction but also sustained investment in teacher capacity building and leadership development (Schildkamp, 2019). Overall, the findings underscore the importance of strengthening data systems, enhancing digital competencies, and institutionalizing systematic monitoring processes to bridge the gap between perceived usefulness and practical feasibility. Sustainable improvement will require coordinated efforts at the school, district, and policy levels.

### 3.2 Model Development and Expert Validation

This phase reports the findings from the development and expert validation of the proposed model (Table 2). The results reflect the degree of conceptual soundness, structural clarity, contextual appropriateness, and feasibility of the model, as evaluated by specialists in the field. Revisions made based on expert feedback are also reflected in the finalized model.

Table 2. Expert evaluation

| Evaluation item               | Accuracy |      |         | Appropriateness |      |         |
|-------------------------------|----------|------|---------|-----------------|------|---------|
|                               | Mean     | SD   | Level   | Mean            | SD   | Level   |
| 1. Principles                 | 4.67     | 0.49 | Highest | 4.50            | 0.52 | High    |
| 2. Objectives                 | 4.33     | 0.89 | High    | 4.75            | 0.45 | Highest |
| 3. Content                    | 4.33     | 0.49 | High    | 4.33            | 0.89 | High    |
| 3.1 Module 1                  | 4.67     | 0.49 | Highest | 4.33            | 0.49 | High    |
| 3.2 Module 2                  | 4.42     | 0.52 | High    | 4.67            | 0.49 | Highest |
| 3.3 Module 3                  | 4.33     | 0.49 | High    | 4.33            | 0.89 | High    |
| 3.4 Module 4                  | 3.83     | 0.72 | Highest | 4.50            | 0.52 | High    |
| 3.5 Module 5                  | 4.42     | 0.67 | High    | 4.58            | 0.52 | Highest |
| 3.6 Module 6                  | 4.58     | 0.67 | Highest | 4.42            | 0.90 | High    |
| 3.7 Module 7                  | 4.58     | 0.52 | Highest | 4.33            | 0.49 | High    |
| 4. Model process              | 4.58     | 0.52 | Highest | 4.75            | 0.45 | Highest |
| 5. Measurement and evaluation | 4.67     | 0.49 | Highest | 4.50            | 0.52 | High    |
| 6. Success conditions         | 4.17     | 0.58 | High    | 4.67            | 0.49 | Highest |
| Overall                       | 4.43     | 0.37 | High    | 4.51            | 0.48 | Highest |

Table 2 presents the expert evaluation of the community-based student support system development model in terms of accuracy and appropriateness. Overall, the model was rated at a high level of accuracy ( $M = 4.43$ ,  $SD = 0.37$ ) and the highest level of appropriateness ( $M = 4.51$ ,  $SD = 0.48$ ), indicating strong expert validation. Across components, the model process, principles, and measurement and evaluation received particularly high ratings. Most modules were evaluated at high to highest levels in both dimensions, confirming that the model demonstrates conceptual clarity, structural coherence, and contextual suitability for enhancing primary students' learning quality in Northeastern Thailand.

The high overall ratings for both accuracy and appropriateness suggest that the developed model is theoretically sound and contextually aligned with the needs of primary schools. The particularly strong evaluation of the model process reflects the importance of systematic implementation procedures. Implementation research emphasizes that clearly structured processes enhance fidelity and sustainability of educational innovations (Fixsen et al., 2005). Therefore, the high expert agreement indicates that the model is well-positioned for practical application. The strong ratings for principles and objectives demonstrate conceptual alignment with school improvement and instructional leadership frameworks. Research has consistently shown that coherent vision, goal clarity, and structured supervision systems significantly contribute to student outcomes (Hallinger, 2011; Robinson et al., 2008). The inclusion of clear measurement and evaluation mechanisms further strengthens the model, as evidence-based monitoring supports continuous improvement and accountability (Schildkamp, 2019). Moreover, the community-based orientation of the model corresponds with the literature emphasizing collaborative partnerships among schools, families, and communities as essential factors in improving student learning (Epstein, 2011). Community engagement enhances shared responsibility and resource

mobilization, particularly in regional or opportunity expansion schools where external support structures are crucial. Although all components were rated highly, slight variations among modules may reflect contextual complexity in operationalizing community-based mechanisms. Educational reform literature suggests that adaptive leadership and capacity building are necessary to translate well-designed models into effective practice (Fullan, 2016). Thus, successful implementation will require ongoing professional development and contextual adaptation. In summary, the findings provide empirical support for the structural validity and contextual feasibility of the model. The strong expert validation indicates readiness for pilot implementation and potential scalability in similar educational settings.

### 3.3 Implementation and Effectiveness Testing

This phase presents the outcomes of field implementation, focusing on changes in participants' knowledge, observed practices, and satisfaction levels following the intervention. The findings provide empirical evidence regarding the effectiveness of the developed model in real school settings (Table 3).

Table 3. Implementation result

| Test     | Mean  | SD   | Paired differences | <i>t</i> | Sig.(1-tailed) | P-value |
|----------|-------|------|--------------------|----------|----------------|---------|
| Pretest  | 24.60 | 5.39 | 6.93               | 4.39     | 8.64           | .000    |
| Posttest | 31.53 | 1.80 |                    |          |                |         |

According to Table 3, the pre-test and post-test results of the 30 participants revealed a mean score of 31.53 ( $M = 31.53$ ,  $SD = 1.80$ ). When comparing the scores before and after the development process, the post-test scores were significantly higher than the pre-test scores at the .05 level of statistical significance. These findings indicate that the development process effectively enhanced participants' competencies in implementing the community-based student support system aimed at improving the quality of primary education in Northeastern Thailand. The statistically significant improvement reflects the effectiveness of the intervention in strengthening knowledge and practical understanding related to the development of a community-based student support framework.

Table 4. Supervisees' behaviors

| Items                                                                                                                                               | Mean | SD   | Level   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|------|---------|
| The school maintains comprehensive baseline data on students (e.g., health status, family background, academic performance, and behavioral records) | 4.71 | 0.61 | Highest |
| An information system is available that teachers can effectively access and utilize                                                                 | 4.71 | 0.47 | Highest |
| Student data are updated at least once per semester                                                                                                 | 4.64 | 0.50 | Highest |
| Student data are utilized for planning individualized support and interventions                                                                     | 4.79 | 0.58 | Highest |
| A system is in place to ensure data confidentiality and security                                                                                    | 4.36 | 0.63 | High    |
| All teachers are knowledgeable about how to use the data system to support student care                                                             | 4.79 | 0.43 | Highest |
| The school provides analytical reports to administrators and relevant community stakeholders                                                        | 4.71 | 0.47 | Highest |
|                                                                                                                                                     | 4.67 | 0.44 | Highest |

According to Table 4, the evaluation results for Model Package 1, Systematic Student Data Management, which comprised seven items, were assessed by 30 participants. The findings indicated a mean score of 4.67 ( $M = 4.67$ ,  $SD = 0.44$ ), reflecting the highest level of evaluation.

Table 5 shows that teachers, parents, and community representatives expressed a high overall level of satisfaction with the development of the community-based student support system model ( $M = 4.40$ ,  $SD = 0.41$ ). The highest satisfaction ratings were found for the quality of supporting documents ( $M = 4.60$ ,  $SD = 0.58$ ) and the alignment of implementation content with the model objectives ( $M = 4.56$ ,  $SD = 0.58$ ). All items

were rated at high to highest levels, indicating strong stakeholder approval of the model's relevance, implementation process, and practical applicability.

Table 5. Satisfaction level of stakeholders

| Items                                                                                                          | Mean | SD   | Level   |
|----------------------------------------------------------------------------------------------------------------|------|------|---------|
| The implementation content aligns with the objectives of the model                                             | 4.56 | 0.58 | Highest |
| The overall duration of the implementation is appropriate                                                      | 4.28 | 0.89 | High    |
| The training model and methods are appropriate for the current context                                         | 4.32 | 0.48 | High    |
| The quality of the supporting documents used in the implementation process                                     | 4.60 | 0.58 | Highest |
| Supervision, monitoring, and evaluation processes                                                              | 4.40 | 0.50 | High    |
| The extent to which the knowledge and skills gained from this training can be applied to professional practice | 4.24 | 0.52 | High    |
|                                                                                                                | 4.40 | 0.41 | High    |

The findings from Phase 3 provide empirical evidence supporting the effectiveness of the developed community-based student support system model. The statistically significant increase in posttest scores indicates that the implementation process substantially enhanced teachers' knowledge and understanding of the system. The significant difference between pretest and posttest results at the .05 level confirms that the intervention contributed meaningfully to professional learning outcomes. This finding aligns with research suggesting that structured and practice-oriented professional development programs lead to measurable improvements in educators' knowledge and competencies (Desimone & Garet, 2015; Darling-Hammond et al., 2017). Beyond knowledge gains, the behavioral assessment results revealed that teachers demonstrated the highest levels of openness and participation in supervision practices, particularly in systematic student data management. High mean scores across items—such as data utilization for individualized planning and accessibility of information systems—indicate that the intervention influenced not only cognitive understanding but also practical application. This outcome is consistent with implementation science literature, which emphasizes that effective professional learning must translate into observable changes in practice to ensure sustainable impact (Fixsen et al., 2005). The strong behavioral outcomes suggest that the model successfully bridged theory and classroom-level implementation.

Furthermore, stakeholder satisfaction results reinforce the effectiveness of the intervention. The high overall satisfaction rating reflects positive perceptions regarding the relevance, clarity, and applicability of the model. Notably, the highest satisfaction levels were associated with the alignment of implementation content with objectives and the quality of supporting documents. These findings correspond with research emphasizing that coherence between goals, instructional materials, and training processes enhances the effectiveness of educational reform initiatives (Fullan, 2016). When educators perceive alignment and practical support, they are more likely to sustain implementation efforts. The integration of knowledge improvement, behavioral change, and stakeholder satisfaction provides multidimensional evidence of effectiveness. According to Guskey's (2002) framework for evaluating professional development, meaningful reform should demonstrate impact at multiple levels, including participant learning, changes in practice, and organizational support. The results of Phase 3 meet these criteria, suggesting that the developed model not only enhanced individual competencies but also strengthened systemic practices related to student support. Overall, the findings indicate that the community-based student support system model is both educationally effective and practically applicable. The statistically significant learning gains, high levels of behavioral implementation, and positive stakeholder perceptions collectively support the model's potential for sustainable adoption in primary school contexts, particularly within Northeastern Thailand.

### 3.4 Stakeholder Evaluation

This phase reports the evaluation results from key stakeholders concerning the utility and feasibility of the model. The findings offer additional validation of the model's practical applicability, scalability, and potential for sustainable implementation within primary school contexts.

Table 6. Stakeholders' appropriateness

| Items                      | Feasibility |      |         | Usefulness |      |         |
|----------------------------|-------------|------|---------|------------|------|---------|
|                            | Mean        | SD   | Level   | Mean       | SD   | Level   |
| Principles                 | 4.68        | 0.48 | Highest | 4.36       | 0.86 | High    |
| Objectives                 | 4.36        | 0.86 | High    | 4.32       | 0.48 | High    |
| Content                    | 4.32        | 0.48 | High    | 4.60       | 0.50 | Highest |
| Model process              | 4.68        | 0.48 | Highest | 4.36       | 0.86 | High    |
| Measurement and evaluation | 4.40        | 0.50 | High    | 4.32       | 0.48 | High    |
| Conditions for success     | 4.32        | 0.48 | High    | 4.60       | 0.50 | Highest |
| Overall                    | 4.46        | 0.45 | High    | 4.43       | 0.55 | High    |

Table 6 presents stakeholders' ratings of the classroom-based internal supervision development model in terms of practical feasibility and practical usefulness. Overall, the model was rated at a high level for both practical feasibility ( $M = 4.46$ ,  $SD = 0.45$ ) and practical usefulness ( $M = 4.43$ ,  $SD = 0.55$ ).

Among the components, *Principles* and *Model Process* received the highest ratings in practical feasibility, while *Content* and *Conditions for Success* were rated at the highest level in practical usefulness. All components were evaluated at high to highest levels, indicating strong stakeholder agreement regarding the model's applicability and value in practice. These findings suggest that the developed model is both implementable and beneficial within the context of classroom-based internal supervision. The high overall ratings for both practical feasibility and practical usefulness indicate that stakeholders perceive the classroom-based internal supervision development model as both implementable and beneficial in real educational settings. This alignment between feasibility and usefulness is critical for sustainable school improvement, as educational reforms are more likely to succeed when stakeholders recognize both their value and their practicality (Fullan, 2016).

The highest feasibility ratings for the *Principles* and *Model Process* components suggest that the model is grounded in clear conceptual foundations and systematic procedures. Research on instructional leadership consistently emphasizes that structured supervision processes and coherent guiding principles enhance teacher performance and student outcomes (Hallinger, 2011). When internal supervision is embedded within a clear framework, implementation fidelity increases, and professional collaboration becomes more meaningful. Similarly, the highest usefulness ratings for *Content* and *Conditions for Success* indicate that stakeholders view the model as responsive to classroom realities. Robinson et al. (2008) found that leadership practices directly focused on teaching and learning have a significant impact on student achievement. The strong evaluation of these components suggests that the model effectively supports instructional improvement rather than merely administrative compliance.

Moreover, the consistently high ratings across all components align with the concept of school-based and collaborative supervision, which emphasizes teacher engagement, contextual relevance, and reflective practice (Sergiovanni & Starratt, 2007). Supervision models that are classroom-centered tend to foster professional growth and shared responsibility, thereby strengthening instructional quality. From an implementation perspective, the positive stakeholder evaluation reflects readiness for adoption and scaling. Implementation science highlights that stakeholder acceptance and perceived practicality are key predictors of successful reform implementation (Fixsen et al., 2005). The findings therefore provide empirical support for expanding the model within similar educational contexts, particularly in schools seeking to enhance instructional quality in the digital era. In summary, the results demonstrate that the classroom-based internal supervision model possesses conceptual clarity, structural coherence, and contextual relevance. The strong alignment between feasibility and usefulness suggests a high potential for sustainable integration into school improvement practices.

#### 4. CONCLUSION

This study systematically developed and validated a community-based student support system model for improving primary education quality in Northeastern Thailand. The needs assessment revealed clear gaps between current conditions and desired practices, particularly in systematic student data management and structured monitoring processes. The developed model was strongly endorsed by experts for conceptual clarity, structural coherence, and contextual appropriateness. Field implementation demonstrated statistically significant improvement in teachers' knowledge, alongside high levels of practical application in student data utilization and supervision practices. Stakeholders—including teachers, administrators, parents, and community representatives—expressed strong satisfaction and confirmed the model's feasibility and usefulness.

Overall, the findings indicate that integrating structured data systems, collaborative supervision, and community engagement mechanisms can enhance both professional practice and systemic student support, contributing to sustainable improvement in primary education quality.

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