

From Practice to Policy: Institutionalising 7S For Safer and More Resilient TVET Learning Ecosystems

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Abstract- This study explores the application of the 7S of Good Housekeeping, Sort, Set in Order, Shine, Standardise, Sustain, Spirit, and Safety, as a strategic framework for managing a learning ecosystem offering TVET education. Through fostering organisational discipline, environmental sustainability, and disaster preparedness, the 7S methodology enhances institutional efficiency, safety, and resilience. Through structured observations, interviews, and systematic literature review, this research assesses the impact of 7S implementation on workplace safety, operational effectiveness, and educational quality. Findings reveal that integrating 7S principles creates a more organised, secure, and conducive learning environment while strengthening institutional resilience and stakeholder engagement. Additionally, the study highlights the role of 7S in disaster risk reduction, reinforcing sustainable institutional development and academic excellence. Institutionalising this framework, DMMMSU can improve TVET education delivery, ensuring a culture of continuous improvement and preparedness. The study concludes that adopting 7S principles contributes significantly to a safer, more efficient, and resilient educational ecosystem aligned with sustainable development goals.

Keywords: Efficiency, Resiliency, Sort, Set In Order, Shine, Standardise, Sustain, Spirit, Safety, 7S Of Good Housekeeping

Date of Submission: 11/02/2026

Date of Review: 25/03/2026

Date of Acceptance: 02/04/2026

IRJSS / Volume 1, Issue 1, Jan-Jun, 2026

INTRODUCTION

Technical and vocational education, or Technology and Livelihood Education, serves as a cornerstone for workforce development, equipping individuals with specialised skills necessary for industry advancement and national progress. In State Universities and Colleges (SUCs), which function as training hubs for future professionals, effective institutional management is essential to ensure operational efficiency, safety, and resilience. Given the increasing complexity of educational institutions, especially those offering TVET programs, structured methodologies are necessary to optimize learning environments and maintain institutional sustainability.

One such methodology is the 7S of Good Housekeeping, an advanced adaptation of the 5S framework that originated in Japan as a workplace organisation system. Initially developed by Toyota as part of its lean manufacturing principles, the 5S methodology—Sort, Set in Order, Shine, Standardise, and Sustain—was designed to improve productivity and efficiency by maintaining orderly workspaces (Hirano, 1995). Over time, scholars and practitioners expanded this model to incorporate Self-Discipline and Safety, transforming it into the 7S framework to better address workplace hazards, disaster preparedness, and long-term resilience in various sectors, including education (Bayaton & Apalla, 2023).

Despite its widespread adoption in industries such as manufacturing, healthcare, and engineering, research on the application of the 7S framework in educational institutions remains limited. While studies have explored its effectiveness in improving workplace efficiency and safety in industrial settings (Mahlaha et al., 2020), there is a gap in understanding how the methodology enhances institutional resilience and academic quality in SUCs. Universities such as the University of Johannesburg have implemented the 7S framework to improve organisational performance and efficiency in technical education programs (Mahlaha et al., 2020). However, further empirical studies are needed to assess its long-term impact on educational governance and sustainability.

Integrating organisational efficiency with environmental sustainability and disaster risk reduction, SUCs can cultivate adaptive learning environments that enhance both academic quality and institutional governance. This study examines how the 7S framework optimises operational effectiveness, reduces institutional vulnerabilities, and fosters a culture of preparedness, ultimately contributing to the broader agenda of sustainable educational development.

LITERATURE REVIEW

The 7S methodology—Sort, Set in Order, Shine, Standardise, Sustain, Safety, and Spirit—originated from lean management practices and has evolved into a strategic tool for organisational efficiency and resilience (Joshi, 2020). In the context of Technical and Vocational Education and Training (TVET), institutionalising 7S principles fosters structured governance, enhances operational safety, and promotes a culture of continuous improvement (Kumar & Geetika, 2021). When applied to State Universities and Colleges (SUCs), 7S supports the development of disciplined, adaptive learning environments that are responsive to both internal and external challenges.

The integration of 7S into TVET governance aligns with several Sustainable Development Goals (SDGs). SDG 4 emphasises inclusive and equitable quality education and lifelong learning. By promoting organized, hazard-free, and learner-centred environments, 7S contributes to infrastructure improvement and pedagogical sustainability (Grainger-Brown & Malekpour, 2019). SDG 8, which advocates for decent work and economic growth, is supported through the reduction of workplace hazards and the promotion of safe learning spaces that mirror industry standards (Kreinin & Aigner, 2021). Additionally, SDG 3—good health and well-being—is addressed through the safety and spirit components of 7S, which prioritise occupational health and psychosocial support within educational ecosystems (Mensah, 2019).

Studies show that structured housekeeping methodologies like 7S significantly improve institutional performance by reducing waste, enhancing safety awareness, and fostering teamwork (Joshi, 2020). In TVET institutions, these practices translate into better resource management, streamlined workflows, and improved stakeholder engagement. The McKinsey 7S model, though originally designed for corporate strategy, has been adapted to educational settings to harmonise internal elements such as systems, staff, and shared values (Maru, 2015). This alignment enables SUCs to bridge operational gaps and build resilience against disruptions, including natural disasters and systemic inefficiencies.

Institutionalising 7S from practice to policy requires a shift from isolated implementation to systemic integration. This involves embedding 7S principles into strategic planning, performance monitoring, and quality assurance frameworks. As highlighted by UNESCO and the World Bank (2023), resilient TVET systems must be underpinned by strong governance, stakeholder collaboration, and evidence-based reforms. The 7S methodology offers a practical pathway to

operationalize these principles, ensuring that SUCs not only comply with global standards but also lead in shaping future-ready professionals.

Implementing the 7S framework—Sort, Set in Order, Shine, Standardise, Sustain, Safety, and Spirit—within SUCs fosters institutional efficiency, risk mitigation, and stakeholder collaboration. This structured governance strategy directly supports Sustainable Development Goals 4, 8, and 3 by promoting inclusive education, safe learning environments, and occupational well-being. As a strategic housekeeping model, 7S enhances resource management, disaster resilience, and educational quality, reinforcing SUCs' role in cultivating globally competent, future-ready professionals. Its institutionalisation bridges operational gaps and aligns local practices with international standards of excellence.

METHODOLOGY

This study employs a mixed-methods approach, integrating both quantitative and qualitative research methodologies to provide a comprehensive analysis of the implementation of 7S principles in TVET schools, State Universities and Colleges (SUCs), like in the Bachelor of Technology and Livelihood Education in DMMMSU. According to Creswell (2014), mixed-methods research combines numerical data with in-depth qualitative insights to enhance the validity and depth of findings, allowing for a more holistic understanding of complex institutional dynamics.

The quantitative component consists of structured surveys designed to measure the effectiveness of 7S implementation in technical education settings. These surveys capture statistical trends related to operational efficiency, safety protocols, and institutional resilience. Meanwhile, the qualitative component employs structured observations, in-depth interviews, and document analysis to assess how DMMMSU TVET shops and classrooms integrate 7S principles into their governance and educational frameworks. This approach enables a nuanced exploration of best practices, challenges, and institutional adaptations in implementing the 7S methodology.

Employing a mixed-methods design, this study ensures methodological rigor and triangulation, strengthening the reliability of findings and providing actionable insights for institutional improvement. The integration of both research paradigms allows for a more robust evaluation of the 7S framework's impact on technical education institutions, aligning with Creswell's (2014) emphasis on methodological complementarity in social science research.

1. Objective Definition

This study aims to assess the effectiveness of the 7S methodology in improving operational efficiency, promoting safety, and fostering institutional resilience within technical education institutions, with specific attention to TVET Education in DMMMSU. It seeks to identify key challenges and best practices in the implementation of the 7S framework by evaluating its influence on institutional governance, faculty engagement, and student learning environments. Ultimately, the research intends to develop strategic recommendations for institutionalizing 7S principles to ensure long-term sustainability, enhance safety protocols, and optimize the overall management of TVET programs.

2. Data Collection

Data for this study were collected through a multi-method approach to ensure a comprehensive analysis of 7S implementation in State Universities and Colleges (SUC), specifically in Don Mariano Marcos Memorial State University (DMMMSU)- North La Union Campus, College of Education, Technology and Livelihood Education Department. Interviews were conducted with administrators, faculty, and students to gather firsthand insights into institutional practices, challenges, and perceptions regarding the 7S framework. These interviews provided qualitative depth, capturing experiences and perspectives on workplace organisation, safety measures, and operational efficiency. Additionally, structured observations using the 7S of Good Housekeeping Evaluation Checklist were carried out to assess workspace organisation, cleanliness, and adherence to safety protocols. By directly observing institutional environments, specifically in the TLE Laboratories, the study identified practical applications of 7S principles, highlighting strengths and areas for improvement. To derive meaningful insights, the mean was utilised as the primary statistical measure.

Furthermore, a systematic review of institutional policies related to housekeeping and management was performed to evaluate the extent to which 7S methodologies were formally integrated into governance structures. This policy review offered critical insights into institutional commitment and the regulatory framework supporting 7S adoption. Through

this combined approach, the study ensured a rigorous, evidence-based analysis, reinforcing the validity and applicability of findings in technical education settings.

3. Evaluation and Iteration

This study employs descriptive statistics to analyse survey responses, providing a quantitative overview of trends related to the implementation of 7S principles in Don Mariano Marcos Memorial State University - North La Union Campus, College of Education, Technology and Livelihood Education Department. The 7S of Good Housekeeping Evaluation Checklist was utilised to assess workspace organisation, cleanliness, and adherence to safety protocols (See Appendix 1). To derive meaningful insights, the mean was utilised as the primary statistical measure.

The rating scale for evaluating the impact of 7S implementation, as to effectiveness, is described below:

Key indicators, such as efficiency improvements, safety enhancements, and stakeholder engagement, are systematically examined to identify patterns within the collected data.

For qualitative insights, thematic analysis is utilised to explore emerging codes and themes and recurring narratives from structured observations, interviews, and document analysis. This method, as outlined by Braun and Clarke (2006), allows for the identification of meaningful patterns, perceptions, and institutional adaptations associated with 7S implementation. Through rigorous coding and categorisation, thematic analysis captures the depth and complexity of participants' experiences, providing a nuanced understanding of the practical applications and challenges of the 7S framework in educational settings. By integrating both descriptive statistics and thematic analysis, this study ensures a comprehensive approach to data interpretation, triangulating insights from quantitative trends and qualitative narratives to generate well-rounded conclusions on the effectiveness and institutional impact of the 7S methodology.

RESULTS & DISCUSSION

Impact of 7S Implementation

Table 1: Impact of 7S Implementation on Safety and Efficiency in DMMMSU

The implementation of the 7S methodology in Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department, has demonstrated significant improvements in institutional efficiency, safety, and overall organisational discipline. Findings suggest that applying Sort reduces clutter and enhances workflow efficiency, allowing faculty and students to navigate workspaces with greater ease. Likewise, Systematise contributes to organised workspaces and improved accessibility, streamlining administrative and academic processes. These measures collectively establish a foundation for operational excellence by mitigating inefficiencies and optimising functionality.

Further, the principles of Sweep and Standardise reinforce environmental cleanliness and safety protocols, ensuring hazard reduction and the consistent application of risk management strategies. The integration of Safety within the framework strengthens institutional resilience by promoting proactive risk mitigation, safeguarding both students and faculty. However, while Sweep effectively maintains cleanliness, its effectiveness rating suggests a moderate impact, indicating that additional measures may be required to sustain hygienic and hazard-free environments in technical education settings.

Lastly, the principles of Sustain and Spirit foster long-term commitment to safety measures and cultivate a culture of teamwork and discipline among stakeholders. Findings highlight that adherence to these elements reinforces institutional cohesion, supporting both workplace efficiency and organisational resilience. Overall, the strategic application of the 7S framework enhances DMMMSUs' ability to maintain structured, safe, and adaptive learning environments, contributing to improved academic operations and institutional sustainability. This underscores the necessity of integrating 7S principles into higher education governance to support long-term institutional development and operational excellence.

Field Observation, Patrolling and Practices

The 7S methodology has emerged as a transformative framework for fostering operational excellence, safety, and sustainability within Don Mariano Marcos Memorial State University – North La Union Campus, particularly in the

College of Education, Technology and Livelihood Education Department. Through in-depth interviews and field observations, the following codes and themes were identified, each substantiated by personal insights from respondents:

1. Sort – Reduced Clutter, Improved Workflow

Respondents noted a significant improvement in workspace efficiency. One faculty member shared, “Before the 7S training, our storage areas were chaotic. Now, everything has its place, and I can find materials faster, which saves time during class preparation.”

2. Systematize – Organized Workspaces, Enhanced Accessibility

The systematisation of tools and resources was widely appreciated. A laboratory in charge remarked, “We labelled all our equipment and arranged it by frequency of use. It’s now easier for both students and staff to access what they need without confusion.”

3. Sweep – Clean Environment, Reduced Hazards

Cleanliness was linked to safety and morale. As one student observed, “We used to overlook small spills or clutter, but now we clean as we go. It feels more professional and safer.”

4. Standardise – Consistent Safety Protocols

The development of standard operating procedures (SOPs) was seen as a major institutional gain. A department head stated, “Having clear SOPs for classroom and laboratory/shop use has minimised accidents and improved accountability among staff and students.”

5. Sustain – Long-Term Adherence to Safety Measures

Sustainability of practices emerged as a shared goal. The BTLED Program Chair emphasised, “The challenge is not starting the 7S—it’s sustaining it. But with regular monitoring and peer reminders, we’re building habits that last.”

6. Spirit – Enhanced Teamwork and Discipline

The inclusion of “Spirit” fostered a sense of unity. A staff member reflected, “We now take pride in our spaces. Everyone contributes, and it feels like we’re working toward a common goal, not just following rules.”

7. Safety – Improved Risk Management

Safety awareness has become embedded in daily routines. A faculty noted, “We’re more conscious now in checking fire exits, reporting hazards, and even reminding each other to follow protocols. It’s become second nature.”

Challenges in Implementation

Despite the numerous benefits of the 7S methodology, its implementation in Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department faces several challenges, including resistance to change, lack of awareness, and resource constraints. Institutional inertia often hinders the adoption of structured housekeeping frameworks, as faculty and administrative staff may be reluctant to modify established routines. According to Mahlaha et al. (2020), organisations implementing 7S principles frequently encounter resistance due to entrenched workplace cultures that prioritise traditional operational methods over systematic efficiency improvements.

Another significant barrier is the lack of awareness and training among stakeholders. Without proper orientation and capacity-building initiatives, faculty and staff may struggle to integrate 7S principles into daily operations. Research by Njeru, Awino, and Adwet (2017) highlights that successful strategy implementation requires comprehensive training programs to ensure alignment with institutional goals and stakeholder expectations. In educational settings, this gap in knowledge can lead to inconsistent application of 7S methodologies, reducing their overall effectiveness in fostering resilience and efficiency.

Additionally, resource constraints pose a considerable challenge, particularly in SUCs like in Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education

Department, with limited funding for infrastructure improvements and safety enhancements. The study by Sukdeo et al. (2020) emphasises that financial limitations often impede the full-scale adoption of lean methodologies, including 7S, in both academic and industrial settings. Addressing these challenges requires institutional commitment, stakeholder engagement, and strategic resource allocation to ensure sustainable implementation. By fostering a culture of continuous improvement and investing in training and infrastructure, SUCs can overcome these barriers and fully leverage the benefits of the 7S framework in technical education.

Comparison with Previous Studies

Existing research on the 5S methodology in educational institutions underscores its effectiveness in improving organizational efficiency, safety, and workplace discipline. Studies have demonstrated that the structured implementation of 5S principles—Sort, Set in Order, Shine, Standardize, and Sustain—enhances operational performance by fostering a clean, organized, and hazard-free environment (Rohmah, 2024). These findings align with the objectives of the 7S framework, which expands upon 5S by incorporating “Sustain” or Self-Discipline and Safety to further strengthen institutional resilience and disaster preparedness.

Research by Sharma et al. (2025) highlights the role of 5S in sustainable governance within higher education, emphasising its contribution to institutional efficiency and long-term operational stability. Similarly, Abu Bakar et al. (2020) examined the intention to implement 5S among students, revealing that structured housekeeping methodologies significantly improve academic environments by promoting discipline and resource optimisation. These studies provide a strong foundation for understanding how 7S principles can further enhance technical education settings by integrating safety measures and fostering a culture of continuous improvement.

While previous studies validate the effectiveness of 5S in educational institutions, research on the 7S framework remains limited, particularly in the context of State Universities and Colleges (SUCs) offering technical education. The study by Fernández Carrera et al. (2021) explores the transition from 5S to 7S, demonstrating its potential to improve efficiency and organisational performance. However, further empirical investigations are needed to assess the long-term impact of 7S implementation on institutional governance, disaster risk reduction, and academic excellence. This study contributes to bridging this research gap by evaluating the practical applications, challenges, and benefits of 7S in SUCs, reinforcing its relevance in modern educational management.

Institutionalising 7S of Good Housekeeping

Don Mariano Marcos Memorial State University (DMMMSU), specifically in North La Union Campus, College of Education, Technology and Livelihood Education Department, has strategically institutionalised the 7S of Good Housekeeping as a foundational framework to enhance operational efficiency, safety, and sustainability across its campuses. The university’s Disaster Risk Reduction and Management Services (DRRM) spearheaded a comprehensive training initiative in September 2023, which introduced the expanded 7S model—Sort, Set in Order, Shine, Standardise, Sustain, Safety, and Spirit to faculty and staff from various units. This initiative reflects DMMMSU’s proactive commitment to embedding structured housekeeping practices into its educational and administrative systems, thereby fostering a culture of continuous improvement and resilience.

The integration of 7S principles into institutional governance aligns with global quality management standards such as ISO 9001:2015, which emphasise systematic process control, workplace safety, and customer satisfaction. Empirical studies have shown that the adoption of 7S methodologies in academic institutions leads to improved organisational discipline, reduced operational waste, and enhanced stakeholder engagement (Caingin & Dizon, 2020; Villanueva et al., 2021). Moreover, the inclusion of “Safety” and “Spirit” in the traditional 5S model underscores the importance of psychosocial well-being and collective ownership in sustaining institutional reforms.

To ensure long-term institutionalisation, DMMMSU has developed standard operating procedures (SOPs) that are actively implemented in classrooms, laboratories, and administrative facilities (See Appendix 3). These SOPs are reinforced through participatory audits, capacity-building workshops, and policy integration mechanisms that align with the university’s broader mandate of quality assurance and sustainable development. Such structured interventions contribute to the university’s strategic vision of becoming a model for green innovation and resilient education in the region.

DISCUSSION:

The findings of this study underscore the significant impact of 7S implementation on safety, efficiency, and resilience in State Universities and Colleges (SUCs), like Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department. Institutions that systematically integrate Sort, Set in Order, Shine, Standardise, Sustain, Spirit, and Safety report enhanced operational workflows, reduced hazards, and improved disaster preparedness (Bayaton & Apalla, 2023). These improvements align with previous studies on lean management and structured housekeeping methodologies, which emphasise the role of systematic organisation in optimising institutional performance (Mahlaha et al., 2020). The 7S framework, as an extension of the 5S methodology, provides a more comprehensive approach by incorporating safety and self-discipline, ensuring long-term sustainability in educational environments.

Despite these benefits, several challenges hinder the full-scale implementation of 7S in Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department. One of the primary obstacles is resistance to change, as faculty and administrative staff may be reluctant to modify established routines. Research by Njeru, Awino, and Adwet (2017) highlights that institutional inertia often delays the adoption of structured methodologies, necessitating strong leadership and stakeholder engagement to facilitate transitions. Additionally, the lack of institutional support and inconsistent implementation further complicate efforts to integrate 7S principles effectively. Studies on strategy implementation in higher education suggest that policy integration, faculty training, and continuous monitoring are essential for overcoming these barriers (DSWD, 2022). Without institutional commitment and resource allocation, the sustainability of 7S practices remains uncertain.

To ensure successful adoption and long-term effectiveness, Don Mariano Marcos Memorial State University- North La Union Campus must institutionalise 7S principles through policy frameworks, structured training programs, and performance monitoring mechanisms. Research by Abu Bakar et al. (2020) indicates that educational institutions that embed structured housekeeping methodologies into governance models experience sustained improvements in efficiency and safety. Furthermore, collaborative engagement among faculty, students, and administrators fosters a culture of continuous improvement, reinforcing the resilience of technical education institutions. By addressing implementation challenges through strategic planning and stakeholder involvement, SUCs can fully leverage the benefits of the 7S framework, ensuring a safer, more efficient, and adaptive learning environment.

An Analysis of the 7S of Good Housekeeping Practices

The 7S methodology serves as a transformative framework for fostering operational excellence, safety, and sustainability in Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department. Integrating principles rooted in lean management and workplace organisation, it enables institutions to align their physical environments with strategic goals. At Don Mariano Marcos Memorial State University, the 7S framework has been actively institutionalised through capacity-building initiatives and hands-on audits, reinforcing its relevance in technical education governance.

1. Sort – Reduced Clutter, Improved Workflow

The Sort principle emphasises the removal of non-essential items to streamline workspaces. In Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department, this decluttering process enhances workflow efficiency and minimises cognitive overload. At DMMMSU, this was operationalised through targeted audits during the 7S training, where participants identified redundant materials and reorganised office layouts to improve spatial utility. This aligns with lean principles that advocate for the elimination of muda (waste) to optimise productivity.

2. Systematize – Organized Workspaces, Enhanced Accessibility

Systematising ensures logical arrangement and labelling of tools and materials, fostering intuitive access. DMMMSU's implementation included practical exercises in office systematisation, where departments adopted visual management tools such as colour-coded labels and standardised storage protocols. This not only reduced retrieval time but also supported inclusive access for diverse users, reinforcing institutional equity.

3. Sweep – Clean Environment, Reduced Hazards

The Sweep principle promotes cleanliness and routine maintenance. In technical education settings, where exposure to machinery and chemicals is common, this principle is vital. DMMMSU's Disaster Risk Reduction and Management (DRRM) unit emphasised this during their 7S training by conducting real-time inspections and sanitation drives across campuses. Such practices mitigate occupational hazards and instil a culture of shared responsibility.

4. Standardise – Consistent Safety Protocols

Standardize involves codifying best practices to ensure uniformity across institutional units. Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department adopted this through the development of internal guidelines and checklists, enabling consistent application of safety and housekeeping protocols. This standardisation supports regulatory compliance and simplifies onboarding for new personnel, contributing to institutional continuity.

5. Sustain – Long-Term Adherence to Safety Measures

The Sustain principle focuses on embedding 7S practices into institutional culture. Don Mariano Marcos Memorial State University- North La Union Campus, College of Education, Technology and Livelihood Education Department's approach included regular monitoring, peer evaluations, and recognition mechanisms to reinforce adherence. This aligns with the concept of *shitsuke* (self-discipline), ensuring that improvements are not episodic but sustained through behavioural reinforcement and leadership modelling.

6. Spirit – Enhanced Teamwork and Discipline

Spirit fosters collective ownership and morale. DMMMSU's training emphasised this through collaborative workshops and team-based audits, which cultivated a sense of unity among faculty, staff, and students. By fostering teamwork and a collective commitment to maintaining organised and safe workspaces, DMMMSU can strengthen institutional cohesion and create a positive learning environment. A strong sense of discipline and teamwork enhances institutional resilience and adaptability.

7. Safety – Improved Risk Management

The Safety principle reinforces proactive risk management strategies, ensuring that hazards are identified and mitigated before they escalate. Safety underscores proactive hazard identification and mitigation. DMMMSU integrated this into its DRRM framework, linking 7S implementation with broader disaster preparedness strategies. This holistic approach enhances institutional resilience, aligning with SDG 4 (Quality Education) and SDG 11 (Sustainable Cities and Communities).

CONCLUSION

This study affirms the strategic value of the 7S methodology in enhancing safety, efficiency, and resilience in SUCs' ecosystems like DMMMSU-NLUC's TLE Department. Institutionalising Sort, Set in Order, Shine, Standardise, Sustain, Spirit, and Safety fosters disciplined, sustainable, and risk-mitigated learning environments aligned with educational best practices. Findings indicate that 7S adoption improves workspace organisation, like laboratories and offices, safety, and stakeholder engagement, reinforcing governance and academic quality. However, barriers such as resistance to change, inconsistent application, and limited resources highlight the need for policy alignment, sustained training, and stakeholder participation. Ultimately, 7S presents a transformative framework for advancing technical education ecosystems. Future research should assess its long-term institutional impact and cross-context applicability to further establish its role in sustainable and responsive education governance.

RECOMMENDATIONS

To ensure the long-term effectiveness of 7S implementation within State Universities and Colleges (SUCs), particularly at Don Mariano Marcos Memorial State University–North La Union Campus, it is recommended that the institution pursue a multi-tiered strategy encompassing policy integration, capacity development, and participatory governance. First, embedding 7S principles—Sort, Systematise, Sweep, Standardise, Sustain, Spirit, and Safety—into existing institutional frameworks aligns them with governance, safety, and instructional standards, transforming them from

standalone initiatives into core elements of operational and educational excellence. Faculty and staff development must be prioritised through structured training programs that utilise experiential learning and department-specific case studies, highlighting connections between 7S practices, curriculum delivery, and disaster risk reduction, especially in technology and livelihood education contexts. To localise and sustain these efforts, a Contextualised-Based Action Research (CBAR) approach should be employed, enabling departments to collaboratively audit, refine, and document their 7S strategies for scalability across SUCs. Additionally, implementing performance monitoring systems and recognition mechanisms fosters long-term adherence by reinforcing the principle of self-discipline. Finally, building partnerships with local government units and DRRM councils positions 7S as a strategic tool for advancing community-centred resilience, further aligning SUC initiatives with Sustainable Development Goals. Through these integrated measures, institutions like DMMMSU can elevate the 7S framework from a housekeeping protocol into a driver of safety, efficiency, and instructional resilience

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ACKNOWLEDGMENTS

The researchers sincerely thank the faculty of the College of Education and research personnel of DMMMSU-NLUC, and respondents for their invaluable insights and support in refining this study. Deep gratitude is also extended to our families and academic colleagues for their encouragement and guidance. Above all, to God Almighty for the gift of wisdom, strength, and unwavering guidance throughout this scholarly journey.