

THE ROLE OF QUALITY MANAGEMENT SYSTEM IN ENHANCING THE QUALITY CULTURE OF POSTGRADUATE PROGRAMS AT SUPERIOR UNIVERSITY FAISALABAD CAMPUS

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Abstract

This study examined the role of the Quality Management System (QMS) in fostering a quality culture in teacher education programs, focusing on prospective teachers, faculty, and administrators. Employing a mixed-methods convergent parallel design, data were collected from 331 participants, including a director, department heads, teachers, and prospective teachers, using structured surveys and semi-structured interviews. Quantitative analysis included descriptive statistics, correlation, and regression to examine relationships between QMS, campus quality structure, and quality culture. Qualitative data were analyzed thematically to explore perceptions of QMS implementation, leadership support, institutional challenges, and strategies for improvement. Results indicated that QMS and campus quality structures significantly predict quality culture, with structured procedures and institutional support enhancing the adoption of quality-oriented behaviors among prospective teachers. Qualitative findings highlighted challenges such as resistance to change, limited training, and workload, while suggesting strategies including professional development, improved communication, and stakeholder engagement. The study underscores the interdependence of procedural and cultural factors in fostering a sustainable quality culture and offers practical recommendations to strengthen QMS effectiveness in teacher education programs.

Keywords: Quality Management System, Quality Culture, Teacher Education, Mixed-Methods, Campus Quality Structure

Introduction

Quality improvement has become a central focus in higher education institutions across the globe, as these institutions strive to achieve excellence, maintain credibility, and respond to rising expectations from stakeholders. Among the various mechanisms designed to strengthen institutional performance, the implementation of a structured Quality Management System (QMS) has emerged as a crucial framework for enhancing academic and administrative processes (Sallis, 2014). With QMS, there are well-organized processes designed to help establish standardized quality in educational programs, accountability, and continuous improvement (Deming, 1986). The role of a powerful QMS is even greater in teacher education programs where the training of future teachers is a crucial part of the national development process. A beginning teacher needs quality training, sufficient preparation as a professional, prompt supervision, and systematic learning experiences so that he or she becomes a competent teacher.

Similar to QMS, a robust culture of quality in higher education must be developed to maintain the long-term change. Quality culture can be described as the shared values, beliefs, attitudes, and practices that help to improve quality throughout an institution (Harvey and Stensaker, 2008). Whereas QMS describes formal procedures, quality culture makes sure that these procedures are internalized and are being practiced by faculty, administrators, and students. Ehlers (2009) underscores the fact that quality culture is the human and psychological component of quality assurance, which influences how people experience and interact with quality undertakings at the institutional level. Without an appropriate culture, QMS can be scaled down to a compliance program as opposed to a process that can bring about change.

The regulatory bodies in Pakistan have highlighted the importance of having strong quality assurance systems in teacher education programs in the country like the Higher Education Commission (HEC). These mechanisms hold that the future teachers will receive training in alignment to standardized and internationally aligned measures to enhance the general teacher training system (HEC, 2021). Teacher training programs must be subjected to strict control since it is the one that influences professional values, pedagogical knowledge, and classroom skills. Thus, the knowledge of the roles of QMS in such programmes, and the role of QMS in the development of a wider quality culture is of importance in ensuring that the would-be teachers have the professional training to become successful in the teaching field.

The current body of literature identifies the fact that QMS has a positive impact on curriculum design, the quality of instruction, the quality of assessment techniques and academic governance in the institutions of higher learning (Owlia & Aspinwall, 1997). It helps in creating clarity in the procedures, better communication, faculty development and standard learning environments all of which have direct influence on the training of the future teachers. Moreover, QMS enhances uniformity and openness in the academic procedures, which facilitates the establishment of an atmosphere where the future teachers would be able to acquire the necessary teaching skills (Srikanthan and Dalrymple, 2007). In spite of its significance, QMS has a common problem of difficulty in implementation in institutions. Examples of these challenges can be the lack of professional development opportunities, the lack of administrative support, limited resources, the inability to accept procedural changes, and the lack of awareness about quality standards (Khan and Naeem, 2018). These challenges need to be understood in determining the gaps between the policy and practice as well as determining strategies that can be used to improve the implementation of the QMS.

The effectiveness of institutional quality practices directly impacts on prospective teachers who are the future workforce in the teaching profession. Their views about the quality of the instruction, their supervision, their evaluation of fairness, and their academic support give significant information in terms of how effective a QMS is operating. Faculty, conversely, are central agents of quality processes, and they incorporate the standards of QMS into instruction, assessment, and professional learning. In the meantime, department heads and academic administrators are in charge of operationalizing QMS to make sure that the processes are adhered, the evaluation is done, and the quality improvement plans are put in place. The analysis of views of these groups will give a detailed insight into the relationship between QMS and quality culture and institutional structure.

The proposed research employs the mixed-method method that presupposes a convergent parallel design, according to which quantitative and qualitative data can be gathered concurrently (Creswell and Plano Clark, 2018). Perceptions and effectiveness of QMS and quality culture are measured by using surveys, and semi-structured interviews are taken to get a detailed experience of administrators and faculty. The approach to the methodology enhances the validity of the results obtained since it unites the numerical trends with the explanation in the context that provides a detailed analysis of quality practice in teacher education settings.

Since the issue of quality assurance is gaining relevance in equipping qualified and professionally accountable teachers, the current research will set out to discuss QMS that is applied by teacher education programs, the effectiveness of the current quality culture, how QMS and institutional quality structure relate, which issues are encountered during the implementation of the quality culture, and how the quality culture can be reinforced based on enhanced QMS processes. It is hoped that the results of this study will further the overall discussion of the quality assurance in teacher education and will provide viable guidelines in improving training of future teachers.

Objectives of the Study

- To examine the Quality Management System implemented in teacher education programs.
- To identify the effectiveness of the quality culture among academic staff and prospective teachers.
- To determine the relationship between the Quality Management System and the institutional quality structure.
- To identify the challenges faced in implementing the Quality Management System at the campus level.
- To propose strategies for enhancing quality culture through improved QMS practices in teacher education programs.

Literature Review

Quality Management Systems in Higher Education

Quality Management Systems (QMS) have taken center stage in institutions of higher learning across the globe as they strive to promote accountability, improve academic excellence and global quality standards. QMS in education is based on frameworks of industrial quality improvement and combines methodological processes that are meant to facilitate the ongoing improvement in teaching, learning, assessment, and administrative operations (Sallis, 2014). The QMS fundamental principles, which are customer satisfaction, constant improvement, process and decision-making using evidence, have been significantly modified in universities to enhance the performance of the institutions (Deming, 1986). QMS has also been influential in the teacher education to moderate curriculum implementation, assessment practices, training oversight, and pedagogical skills of the potential teachers in accordance with the set professional standards.

The research on higher education focuses on the functionality of QMS using organized elements like internal audits, program reviews, faculty and student feedback mechanisms (Owlia and Aspinwall, 1997). These processes help towards enhancing academic transparency and the creation of informed decision making. Srikanthan and Dalrymple (2007) argue that QMS assists institutions to stop using the old-fashioned system of administration to the more integrated systems that focus on quality results. This transition has particular significance concerning teacher education programs, the goal of which is neither the academic success but rather professional identity formation, teaching competence, and moral accountability.

International standards like the ISO 9001, EFQM Excellence Model and even national quality assurance policies have been used in the design of internal QMS of institutions (Kanji and Tambi, 1999). The Higher Education Commission (HEC) has established quality assurance standards which describe the process of program evaluation, faculty review, student support mechanism, and administrative control in the Pakistani context (HEC, 2021). The guidelines are meant to enhance the teacher preparation programs through facilitating uniformity and ensuring that the teacher graduates possess competencies in giving instructions. Nevertheless, there are still lapses in institutional capacity, faculty training and institutional readiness to adopt

QMS wholly despite policy efforts (Khan & Naeem, 2018). Implying the literature, the implementation of QMS is possible only with structural changes as well as organizational commitment, support provided by the leadership and ongoing professional growth of the faculty.

Quality Culture and Its Importance in Teacher Education

Quality culture may be defined as a set of shared values, attitudes, beliefs and norms that together facilitate the idea of continuous improvement with regards to education settings (Harvey and Stensaker, 2008). In contrast to formal QMS processes that are concerned with regulation and documentation, quality culture is more collaborative and psychological in terms of quality improvement. It entails shared and personal ownership of quality, a drive to make practices better, and a climate of an institution that fosters innovation, reflection and continuous professional development (Ehlers, 2009). Quality culture is crucial in the context of teacher education since future teachers, who do not receive instruction solely based on what they learn in curriculum, are also taught within an institutional culture, an institutional mentoring climate and an institutional mentoring relationship.

According to research, quality culture facilitates the efficient teaching process, faculty involvement, and student learning outcomes (Bendermacher et al., 2017). Faculty and administrators developing a common vision of quality make the process of decision making more participatory, transparent and focused on the goals of the institution. This group-based setting enables future teachers to be exposed to a model of professionalism and reflective practice, which they are subsequently transposed into the classroom. Moreover, culture of quality can assist the faculty to experiment with new teaching methods, undertake academic activities and enhance supervision processes that are critical in teacher training programs (Yorke, 2000).

Nevertheless, developing a good quality culture in higher education is not easy because of the resistance to change, the absence of incentives, poor communication and insufficient leadership support (Harvey and Williams, 2010). Institutions can implement QMS in a procedural manner without reflecting its philosophical background on its culture. Consequently, the quality processes can turn into bureaucratic as opposed to transformative. Such disconnect has the capacity to undermine the developmental experience of the would-be teachers in the case of teacher education which restricts their exposure to high quality and reflective pedagogical practices. The literature also indicates that quality culture is flourishing in the settings where a faculty development program, a performance feedback system, a cooperative teaching model, and a student-centered pedagogies are in place (Newton, 2013). Therefore, institutional quality culture is of great importance in terms of the effectiveness of QMS.

Relationships Between QMS and Institutional Quality Structures

Some of the studies highlight that QMS and quality culture are interdependent factors of institutional quality assurance. Although QMS helps to give the structural and procedural basis, quality culture makes them to be sustained and effective (Ehlers, 2009). The connection between the two constructs is more applicable in teacher training programs where academic standards, professional competencies and ethical responsibilities are paramount in the training of future teachers. The quality culture and QMS are mediated by institutional quality structures which include quality improvement cells, departmental committees, faculty review mechanisms and administrative oversight (Sahney, Banwet, & Karunes, 2004).

Studies single out various hurdles that are obstacles to successful implementation of QMS in higher education. Such challenges are the lack of an administrative capacity, lack of funding, faculty training, and absence of stakeholder involvement (Khan & Naeem, 2018). The QMS procedures might seem to the faculty members as encumbering workload instead of helping in academic quality. As well, inconsistent communication, employee resistance and lack of

knowledge of quality standards may undermine institutional attempts at implementing QMS procedures into the quality culture (Harvey and Williams, 2010). These challenges can have an adverse impact on the course delivery, teaching practicum supervision, research mentoring, and evaluation practices in teacher education programs.

The other problem related to the different meanings of quality in faculty, students, and administrators. Tam (2001) asserts that institutions of higher learning are usually faced with the difficulty of developing a conceptualization of quality owing to the dissimilar expectations and experiences. This inconsistency has the impact on the coherence of institutions, which makes it hard to operationalize QMS. It is also mentioned in the literature that hierarchical or rigid institutions have more obstacles to adopt QMS practices into their quality culture than collaborative and decentralized ones (Bendermacher et al., 2017). In the case of teacher education programs, where interaction, feedback, and practical training are key factors, such institutional diabetes can destabilize the process of development of the future teachings.

Theoretical Framework

The current research is based on two significant frameworks according to which the role of Quality Management Systems (QMS) in the development and maintenance of quality culture within school institutions is perceived. The initial one is the Total Quality Management (TQM), which stresses on the concept of continuous improvement, stakeholder satisfaction, participatory decision-making, and data-driven processes (Deming, 1986; Juran, 1992). In the educational context, TQM offers the basis of applying formal quality systems that are accountable, congruent and continuously improving the teaching, learning and administrative practices.

Secondly is the Organizational Culture Model of Schein that describes how organizational behavior is framed by shared values, norms and practices (Schein, 2010). In educational settings, the model can be used to explain the impact of a QMS on the beliefs and practices of academic leaders, teachers and potential teachers and eventually reinforce a culture of quality throughout the institution. Collectively, these frameworks highlight the fact that an effective QMS is not only about ensuring that standards are met, but also changing the culture of the institution by encouraging collaboration, openness, and evidence-based change.

Research Methodology

This study employed a mixed-methods approach using a convergent parallel design. The population of the study consisted of 1 Director Academics, 5 Heads of Departments, 25 teachers, and 300 prospective teachers enrolled in various programs. A stratified sampling strategy was used to ensure representation across administrative and academic groups. Quantitative data were collected through structured survey questionnaires designed to measure perceptions of QMS, campus quality structure, and the prevailing culture of quality. The survey items were adapted from previously validated instruments used in higher education quality assurance research to ensure reliability and content validity.

Qualitative data were obtained through semi-structured interviews with selected administrators, department heads, and teachers. These interviews explored themes related to the implementation of QMS, leadership support, communication practices, institutional challenges, and strategies for strengthening quality culture. The interview protocols allowed participants to elaborate on their experiences while ensuring that key areas aligned with the study objectives were covered.

Quantitative data analysis included statistical tests such as correlation and regression were applied to determine the strength and direction of relationships. Qualitative data were analyzed through thematic analysis, involving coding, categorization, and identification of major themes that reflected participants' viewpoints on QMS effectiveness and challenges in implementation

Ethical considerations were strictly followed, including informed consent, anonymity, confidentiality, and voluntary participation.

Results and Findings
 Part A (Quantitative Results)

Table 1
 Demographic Characteristics of Respondents

Variable	Category	<i>f</i>	%
Role	Director	1	0.3
	Head of Department	5	1.5
	Teacher	25	7.6
	Prospective Teacher	300	90.6

Demographic profile of the respondents shows that most of the respondents were future teachers (90.6%), then there were teachers (7.6%), heads of department (1.5%), and one director (0.3). This distribution is due to the major orientation of the study to the perceptions of the prospective teachers towards the Quality Management System (QMS) and quality culture.

Table 2
 Descriptive Statistics of Study Variables

Variable	Mean	SD
Quality Management System (QMS)	3.78	0.65
Campus Quality Structure	3.61	0.72
Quality Culture Among Prospective Teachers	3.49	0.70

(Scale: 1 = Strongly Disagree, 5 = Strongly Agree)

The descriptive statistics indicate that the respondents had a positive perception about the Quality Management System (QMS) having a mean score of 3.78 (SD = 0.65) on the 5-point scale. It means that most of the respondents also stated that QMS practices were applied well in their programs. The mean of the campus quality structure was also favorable (3.61, SD = 0.72) and it indicates the institutional resources, leadership support, and organizational processes have been moderately strong in supporting the quality initiatives. The quality culture mean of the prospective teachers was slightly lower at 3.49 (SD = 0.70), and it may be considered that although there is an overall awareness and acceptance of quality practices, shared values, attitudes, and behaviors that can maintain a strong quality culture could be strengthened. In general, these descriptive findings suggest that perception of the QMS implementation and quality culture of the participants of the study is positive though not optimal.

Table 3
 Correlation among Variables

Variable	1	2	3
1. QMS	1		
2. Campus Quality Structure	0.62**	1	
3. Quality Culture	0.59**	0.68**	1

Note: $p < 0.01$ (two-tailed)

The correlation table shows that there are significant positive relationships between the important variables in the study. Campus quality structure ($r = 0.62$, $p < 0.01$) and quality culture ($r = 0.59$, $p < 0.01$) have a positive relationship with the QMS ($r = 0.62$, $p < 0.01$), which shows that effective quality management practices are closely related to the well-developed institutional structures and the development of a quality-oriented environment among a potential teacher. Likewise, campus quality structure has a positive relationship with quality culture ($r = 0.68$, $p < 0.01$) indicating that when strong leadership, structured processes, and resource support are available, the internalization of quality values among potential teachers is more likely to develop. Such findings indicate the interdependence of QMS, organizational support, and creation of the quality culture, which is why the theory assumption that structural and procedural processes have a direct impact on cultural adoption in educational environments is right.

Table 4

Regression Analysis Predicting Quality Culture

Predictor Variable	B	SE	β	t	p
Quality Management System (QMS)	0.42	0.05	0.38	8.40	<0.001
Campus Quality Structure	0.35	0.06	0.32	5.83	<0.001
R ²				0.56	

The regression analysis offers an understanding of how the predictive capacity of QMS and campus quality structure is on quality culture among future teachers. Quality culture was significant (both with $\beta = 0.38$, $t = 8.40$, $p < 0.001$) predictor by both QMS and campus quality structure. These results indicate that the increase of the QMS practices and the institutional quality framework results in the higher adoption of the quality-oriented behavior and attitudes by the future teachers. The model accounts 56 percent of the variability in quality culture ($R^2 = 0.56$) which is moderately strong and it highlights the importance of the procedural and structural factors in designing a sustainable quality environment. This evidence goes further to prove that organizational systems and leadership aspects play a significant role in promoting a positive quality culture within the teacher education programs.

Part B (Summary of Qualitative Results)

Table 5

Themes, Codes, and Evidences from Interviews (Administrators & Teachers)

Theme	Codes	Evidences
Effectiveness of QMS	Implementation of procedures, monitoring, feedback systems	“The QMS provides a clear framework for reviewing course delivery and assessment, which helps us maintain standards.” – HOD 2
Leadership Support	Guidance, encouragement, supervision	“The administration encourages us to follow quality protocols, which makes it easier to enforce standards in classes.” – Teacher 5
Campus Quality Structure	Resources, policies, organizational clarity	“We have committees that regularly check on teaching and learning practices, which strengthens our processes.” – Director
Challenges in QMS Implementation	Resistance to change, limited training, workload	“Some teachers feel that QMS adds paperwork and extra responsibilities, which makes implementation slow.” – Teacher 12
Strategies for Improvement	Training, communication, stakeholder involvement	“Regular workshops and open communication between teachers and administration would make the system more effective.” – HOD 3

The qualitative study allowed identifying some important insights into the operation of QMS and its role in the quality culture. The effectiveness of QMS is the first theme that demonstrates that administrators and teachers tend to consider the system as a systematic framework, which directs the course delivery, assessment, and monitoring. The participants highlighted that the regularity of procedures, feedback, and maintenance of academic standards are facilitated using feedback and regular practices, which confirm that QMS offers clarity and responsibility in the daily operations.

The second theme, which was leadership support, was identified as one of the factors that affected QMS success. The respondents indicated that administration support and counseling helped them to comply with the quality standards. It was pointed out by teachers that the staff members are motivated to adhere to and internalize quality practices when leadership actively monitors and promotes quality initiatives. This is in line with the quantitative result that quality structure in the campus is a significant predictor of quality culture.

The third theme, campus quality structure indicates how organizational resources, policies, and institutional mechanisms would be involved in supporting QMS implementation. Respondents mentioned committees, policy frameworks and procedural clarity as necessary to support teaching and learning practices. According to these findings, structural support plays a vital role in the translation of QMS to significant quality culture outcomes.

The fourth theme, problems with QMS implementation, singled out the following obstacles: resistance to change, lack of training, and increased workload. Other teachers worried that more paperwork and procedure might retard the process or make it lose momentum. These issues are associated with the fact that the mean score of quality culture is a bit lower in quantitative data, which means that areas of improvement are required.

Table 6
Combined Findings of Quantitative and Qualitative Analysis

Study Variable / Theme	Quantitative Findings	Qualitative Findings	Integrated Interpretation
Quality Management System (QMS)	Mean = 3.78 (SD = 0.65); positively correlated with quality culture (r = 0.59, p < 0.01); significant predictor of quality teaching and assessment culture (β = 0.38, p < 0.001)	Participants indicated that QMS provides structured procedures, monitoring, and feedback systems that guide teaching and assessment practices.	QMS is effective in providing clarity, standardization, and accountability, directly influencing the adoption of quality culture among prospective teachers.
Campus Quality Structure	Mean = 3.61 (SD = 0.72); correlated with QMS (r = 0.62) and quality culture (r = 0.68, p < 0.01); significant predictor of quality culture (β = 0.32, p < 0.001)	Administrators and teachers highlighted the importance of leadership support, policies, committees, and organizational resources in facilitating QMS implementation.	Strong institutional structures and supportive leadership enhance the effectiveness of QMS and contribute to the internalization of quality values among prospective teachers.
Quality Culture Among Prospective Teachers	Mean = 3.49 (SD = 0.70); moderate adoption of quality-oriented practices	Participants noted that quality culture is developing and can be strengthened through better communication, and stakeholder engagement.	Quality culture is positively influenced by both QMS and campus quality structures; however, challenges like resistance to change and workload may limit full internalization of quality practices.
Challenges in Implementation	Not directly measured quantitatively	Resistance to change, limited training, and workload were frequently mentioned as barriers by teachers and administrators.	Challenges in implementing QMS may impede its effectiveness in fostering a strong quality culture, highlighting the need for strategies to address these barriers.
Strategies for Improvement	Not directly measured quantitatively	Recommendations include professional development workshops, improved communication, and stakeholder participation.	Implementing these strategies can enhance QMS effectiveness and strengthen the quality culture among prospective teachers.

This table 6 integrates survey results and interview findings into one clear summary, showing how quantitative data supports and complements qualitative findings.

Discussion

The current research discussed the impact of the Quality Management System (QMS) on the improvement of the quality culture of the teacher education programs in respect to prospective teachers, faculty and administrators. The results that were achieved with the help of convergent parallel mixed-methods approach present the evidence of the substantial interaction of QMS and the quality structure on the campus and the evolution of quality culture. The quantitative

and qualitative findings indicate that well-organized quality practices, conducive institutional arrangements, and involvement of leadership play a pivotal role in developing a good quality culture in a potential teacher.

The results of the quantitative analyses were that the participants had a positive perception of QMS and the mean score was 3.78 ($SD = 0.65$). Moreover, campus quality structure had a positive relationship with QMS ($r = 0.62, p < 0.01$) and quality culture ($r = 0.59, p < 0.01$). The regression analysis showed that QMS was a significant predictor of quality culture in future teachers ($p = 0.001, 0.38$), and a considerable proportion of the variance ($R^2 = 0.56$). The results of this study are in agreement with the earlier studies that claim that systematic application of the quality management processes is the major aspect that improves the institutional performance and enhances teaching and learning practices (Sallis, 2014; Owlia and Aspinwall, 1997). In particular, QMS gives frameworked policies, tracking systems, and feedback practices that enable faculty and administrators to ensure academic practices, assessment, and program delivery remain consistent (Srikanthan & Dalrymple, 2007). These processes are essential in teacher education context because future teachers depend on these processes to be exposed to quality of teaching and professional practice on a regular basis so as to acquire competencies and professional identity (Harvey and Stensaker, 2008).

The structure of quality on the campus was also a major predictor of quality culture ($\beta = 0.32, p < 0.001$), which substantiated the notion of the significance of institutional support, the role of leadership, and the access to organizational resources. Qualitative information also revealed that administrators and faculty members believed leadership direction, policy articulation, and the committee monitoring were critical elements of the quality frameworks on campuses. The results are aligned with the existing body of literature that argues that supportive leadership and resource distribution are beneficial to the process of implementing QMS to establish an environment where quality-oriented practices can thrive (Bendermacher, oude Egbrink, Wolfhagen, and Dolmans, 2017; Newton, 2013). Engaging the leadership in working with the faculty and the future teachers motivates and holds the leaders accountable and helps internalize quality values and practices (Harvey and Williams, 2010). This implies that even though QMS offers procedural frameworks, it is the institutional quality structure that will operationalize the processes efficiently such that a long-term impact and positive change in culture to quality are realized.

It was also found that the quality culture of the future teachers (mean = 3.49, $SD = 0.70$) is still in the process of development, though it is rather positive. Qualitative data revealed that future teachers are having a quality culture in their contact with faculty, program conformity, and engagement in systematic learning and evaluation experiences. Nevertheless, the respondents recognized the obstacles like resistance to change, heavier workload, and the lack of training opportunities to become a fully embracing organization of quality. These issues support past studies that have reported that procedural adherence is not enough to establish the quality culture but a common set of values, attitudes, and participation are required to be sustainable (Ehlers, 2009; Tam, 2001). The problems may have a direct influence on the learning experience of prospective teachers in the teacher education programs and reduce their capacity to internalize professional standards and reflective practices.

The presence of quantitative and qualitative results in the process of the results integration underlines the interdependent character of the QMS, campus quality structure, and quality culture. The correlation results displayed that there is a positive correlation between all these variables that are significant, which means that improvement in procedural and structural elements have strong correlation with cultural adoption in potential teachers. This was supported by the qualitative data that depict how well organized QMS practices with a supporting leadership and institutional policies can be translated into behaviors and attitudes

that are observable to reflect the quality culture. This result is consistent with theoretical models like Total Quality Management (TQM) and the model of organizational culture developed by Schein who postulates that procedural systems and organizational culture have to work together to deliver meaningful and sustainable quality improvement (Deming, 1986; Schein, 2010). Stated differently, the scaffolding is made by QMS and institutional structures, and the quality culture shows human and psychological uptake of such practices.

Another strategy to improve quality culture was also offered by the participants, such as professional development workshops, better communication and involvement of all stakeholders. The mentioned recommendations are justified by the past literature since the researchers note that capacity building, participatory decision-making, and ongoing training are essential to defeating resistance and instilling proactive quality culture (Khan and Naeem, 2018; Srikanthan and Dalrymple, 2007). The specified strategies will reduce the challenges outlined, thus making sure that the future teachers do not merely adhere to quality standards but make quality-oriented values and professional practices internal.

The results also demonstrate the importance of coordinating the QMS and the institutional and cultural aspects. Quantitative findings showed that both QMS and campus quality structure were strong predictors of quality culture and qualitative evidence-based results indicated that the participants were convinced that the effectiveness of QMS depends on the leadership involvement, the organizational support and responsive practices. This procedural/cultural interaction urges the point that quality improvement in teacher education is not about compliance alone, but entails instilling a culture of unremitting improvement, reflection, and collective accountability (Harvey and Stensaker, 2008; Bendermacher et al., 2017). To future educators, this kind of integration guarantees them that they are exposed to best pedagogical practice, ethics and professionalism standards required in effective classroom teaching.

Conclusion

The study contributes to the understanding of how QMS and institutional quality structures interact to shape quality culture in teacher education programs. The combined quantitative and qualitative evidence indicates that structured processes, institutional support, and leadership engagement are essential for fostering a sustainable culture of quality. Furthermore, addressing implementation challenges and adopting strategies recommended by participants can further enhance the effectiveness of QMS, ensuring that prospective teachers develop the competencies, professional attitudes, and reflective practices required to meet contemporary educational demands. These findings have practical implications for policymakers, educational administrators, and teacher educators aiming to strengthen quality assurance mechanisms and cultivate a culture of excellence in teacher preparation programs.

Limitations of the study

The study had several limitations. First, the research was conducted in a single campus, which limits the generalizability of the results to other institutions or regions. Second, the sample size of administrators and teachers was relatively small compared to prospective teachers, which may have influenced the diversity of perspectives. Third, data were collected using self-reported surveys and interviews, which may be subject to response bias or social desirability effects.

Recommendations

- Enhance professional development programs for faculty and prospective teachers to strengthen understanding and implementation of QMS.
- Increase leadership engagement and active support to ensure institutional quality structures function effectively.
- Foster a participatory approach that encourages input from all stakeholders, including faculty and students, in decision-making processes.

- Implement regular monitoring, evaluation, and feedback mechanisms to identify gaps in QMS and quality culture practices.
- Improve communication channels to disseminate policies, procedures, and best practices related to quality assurance.
- Address resistance to change by providing training, resources, and incentives that encourage adoption of quality-oriented behaviors.

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