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Training Need Analysis Model for Teachers and Managers: A Case of Trainings at Quaid e Azam Academy for Educational Development, Punjab

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Abstract: Education plays a pivotal role in shaping individuals and societies, driven by the quality of teachers and educational managers. Effective teacher training and continuous professional development are vital to achieving educational excellence. This study explores the importance of Training Needs Analysis (TNA) in the context of education, focusing on the Quaid e Azam Academy for Educational Development (QAED) in Punjab, Pakistan. The research aims to develop a TNA model tailored to the unique needs of teachers and educational managers. The study underscores the significance of TNA in aligning training programs with participants' needs, enhancing teaching quality, and bridging the gap between existing literature and practical TNA requirements.

Key Words: Education, Training Needs Analysis (TNA), teacher training, professional development, educational managers, curriculum design, Pakistan, Quaid e Azam Academy for Educational Development (QAED), qualitative research, TNA model

Introduction

In the landscape of modern education, the role of teachers is vital in shaping the future of nations. Teachers in public sector institutions, in particular, hold a significant responsibility in imparting knowledge, skills, and values to the next generation. Education holds the key to understanding oneself and the environment. It serves as a potent tool for elevating societies through knowledge. For education to be deemed high-quality, teachers must possess excellent training. Across successful education

systems, the teacher's quality stands as the foremost determinant of educational excellence. Effective teacher education and training are pivotal for enhancing education standards.

Teachers Training in Context of Punjab, Pakistan

In the context of the province of Punjab in Pakistan, where education is a cornerstone of societal development, ensuring the effectiveness and competency of government

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teachers is of utmost importance. This paper highlights how the systematic process of Teachers Training followed by a good model of TNA plays a pivotal role in optimizing teaching quality, nurturing adaptability, and ultimately contributing to improved student outcomes.

Punjab, the most populous province of Pakistan, hosts a vast government-run education system that caters to a diverse array of students. Teachers working in the Government sector form the backbone of this system, shaping the educational experiences of millions of young minds. TNA emerges as a powerful tool to assess and address the dynamic professional development needs of government teachers.

Teacher training institutes in Pakistan, as in many other countries, play a pivotal role in the enhancement of the educational sector. These institutes are tasked with preparing prospective educators to take on the challenge of imparting knowledge to students and moulding the next generation of citizens.

Training Need Analysis (TNA)

TNA is a systematic process that involves evaluating the current knowledge, skills, and competencies of employees, in this case, government teachers and educational managers. By identifying gaps between their existing capacities and the demands of their roles, TNA enables targeted and efficient training interventions. In the context of government teachers in Punjab, Pakistan, TNA holds significant importance as it can enhance the quality of education by addressing the specific needs of teachers.

Pakistani Context Compared to high-performing Countries

In 2010 and 2012, the Pakistan Government initiated induction training for newly hired teachers and promotion-linked training, respectively. However, these efforts lacked effective real-time needs assessment, resulting in unsuccessful quality improvement despite substantial budget allocation. Unlike global norms, Pakistan faces issues such as teacher

rationalization and diminishing training quality, undermining the impact of these initiatives.

Literature Review

In contemporary times, organizations recognize the utmost importance of training. Training Need Analysis (TNA) is a systematic process used to identify gaps in knowledge, skills, and competencies among employees, with the aim of designing and delivering appropriate training interventions. This literature review explores the various dimensions of the importance of TNA for government teachers in Punjab, Pakistan.

TNA contributes to teacher motivation by acknowledging their professional development needs. A study by Idris (2023) highlighted how TNA-derived training opportunities show that professional growth is valued, leading to increased enthusiasm and commitment to their roles. The process of identifying those who require training is underscored by a crucial component known as Training Needs Assessment (TNA), as noted by Bakar (2015). Proper implementation of TNA holds immense value as it ensures cost-effective training, thereby motivating and enhancing teachers' performance. Employing diverse TNA tools is essential for organizations to augment employee performance and overall organizational development. Akther, et al. (2018) underscore the significance of personnel in companies, acknowledging them as invaluable assets pivotal in accomplishing objectives and corporate goals. This importance is further emphasized by the role of employee innovation and creativity in accomplishing tasks effectively

Haider (2023) stated in a study that training caused teachers to undergo significant transformations that lead them to reconsider their roles, acquire fresh insights, and enhance their abilities. This is only possible when training has been designed according to proper analysis of needs. In a study conducted (Siddiqui, 2021), it was found that government teachers in Punjab often lack the modern pedagogical techniques necessary for effective

teaching. Training Needs Analysis (TNA) can identify these gaps and provide targeted training to improve instructional methods, classroom management, and student engagement. Enhanced pedagogical skills can lead to better learning outcomes and increased student participation. In the context of government teachers in Punjab, TNA is crucial for identifying gaps in pedagogical knowledge and instructional techniques. Researchers have stressed the need for targeted training programs that address deficiencies in pedagogical skills, leading to more effective teaching practices and engaged classrooms (Hafeez, [2021](#)). Curriculum reforms in Punjab, such as the National Curriculum Framework (2006), require teachers to adapt their teaching methods to align with new educational goals. TNA can ensure that government teachers are well-equipped to implement these reforms effectively along with assessment techniques (Akhtar, [2021](#)).

As technology becomes increasingly integrated into education, government teachers in Punjab need to be adept at using digital tools for teaching. According to another study, TNA can highlight teachers' technological deficiencies and guide the development of training programs that equip them with the skills to use educational technology effectively (Prasad, [2023](#)). With the rapid advancement of technology, TNA becomes essential for helping government teachers integrate digital tools into their teaching methods. A study by Hennessy ([2022](#)) emphasizes that TNA can pinpoint areas where teachers lack digital literacy, enabling tailored training interventions that promote tech-enabled education.

Subject-specific TNA can help identify areas where government teachers lack subject knowledge or struggle to explain complex concepts. The significance of subject-focused training for teachers, which can ultimately improve the overall quality of education provided to students is established (Ahmed, [2021](#)). The direct connection between teacher training based on TNA and student learning outcomes has been explored and it demonstrates that when government teachers

undergo TNA-informed training, it positively affects student performance, emphasizing the cascading impact on the education system (Putri, [2020](#)).

TNA contributes to the professional growth of teachers by recognizing their individual strengths and areas needing improvement. When teachers perceive that their development needs are acknowledged and addressed through training, they tend to be more motivated and committed to their profession. TNA allows for customized professional development plans that cater to individual teacher needs (Sims, [2021](#)). A study underscores how personalized training, rooted in TNA insights, enhances teachers' confidence, job satisfaction, and overall professional growth (Fiorilli, [2020](#)).

TNA-driven training interventions positively impact student learning outcomes where amidst Pakistan's 'learning crisis', it's crucial for the government to address effective learning by reimagining education organization, such as grouping students based on learning levels instead of age or grade, with technology playing a pivotal role, as explored in the study (Adil, [2022](#)). Teachers who undergo targeted training based on identified needs are more likely to create conducive learning environments, leading to improved academic achievements among students. In resource-constrained environments, TNA ensures that limited training resources are allocated judiciously. Demonstrating suitable and methodical training methods has been proven to lead to skill enhancement, subsequently elevating the calibre of employees (Markaki, [2021](#)).

Government education departments often have limited resources. TNA helps allocate training resources effectively by focusing on areas with the most pressing needs (Osamwonyi, [2016](#)). This ensures that resources are utilized efficiently to yield maximum benefit. TNA can foster teacher leadership by identifying potential mentors and trainers within the government teaching community. Recognizing and utilizing experienced teachers for training initiatives can

create a sustainable model of continuous improvement (Cai, [2022](#)).

In order to maintain quality education, investment in teachers' training is crucial. Hence, focusing on conducting training needs analysis is imperative for workforce development in associations, organizations, or institutions (2011). Training not only resolves performance issues but also enhances employees' capabilities, fostering positive changes in knowledge, skills, and attitudes Ghufli ([2014](#)). To sustain a competitive advantage, organizations must establish a continuous learning environment for their workforce, investing significantly in training and learning programs for employee growth (Yousif et al. [2019](#)).

"Training" embodies multifaceted meanings in diverse contexts. It's a process of moulding teacher behaviour to cultivate effectiveness, superior performance, and mastery encompassing content knowledge, professionalism, psychological acumen, and positive attitudes (Rajput-Ray, [2014](#)). Training is a structured approach that aligns multiple steps to meet desired outcomes (Abushamsieh, [2014](#)). It fosters employee skill, knowledge, and attitude development. Armstrong ([2012](#)) defines training as a thoughtful utilization of formal techniques to impart information, enhancing job performance skills. These interpretations underscore the systematic nature of training, requiring meticulous planning to augment employee competence. Viewing training as an investment aligned with organizational objectives rather than an expenditure is essential. Training spans various types, including pre-service, in-service, in-house, external, on-the-job, and off-the-job training (Abushamsieh, [2014](#)).

The quality of education in a country is undeniably intertwined with the competence of its educators and educational administrators. Those engaged in teaching or managing educational endeavours are pivotal resources for educational institutions when they possess the necessary qualifications and expertise. Proficient personnel offer substantial advantages to organizations, as they contribute

positively to various aspects of the company (Hooi, [2019](#)). Consequently, it is imperative for organizations to invest in their staff to maximize the benefits derived. However, challenges emerge when organizations arrange extensive training initiatives, many of which might not enhance employees' overall skills. Such training often fails to boost employee motivation and can even have counterproductive effects (Surface, [2012](#)). This situation also consumes valuable time that could otherwise be utilized for pending tasks, leading to a waste of effort, time, and financial resources.

To address this issue, Training Needs Analysis (TNA) emerges as a solution. TNA is a systematic assessment aimed at identifying the gap between an employee's current education and the training required to bridge that gap (Iqbal, [2011](#)). It aids in pinpointing the precise areas where training is necessary, ensuring that employees receive training only for skills they lack. TNA is an essential initial step in the process of assessing training needs and should be a focal point for human resource departments (Rao, [2017](#)). Its primary function is to ascertain whether specific training is warranted for employees.

Significance of the Study

The importance of Training Need Analysis for government teachers in Punjab, Pakistan, cannot be understated. Through its role in addressing pedagogical gaps, embracing technological advancements, and aligning with curriculum changes, TNA contributes to the holistic development of teachers. By enhancing teacher motivation, impacting student outcomes, and ensuring efficient resource allocation, TNA lays the foundation for a robust education system that empowers both educators and learners alike. Training Need Analysis (TNA) is a systematic process used to identify gaps in knowledge, skills, and competencies among employees, with the aim of designing and delivering appropriate training interventions.

This paper is significant in aiming to underscore the multifaceted importance of

TNA and a well-designed model of TNA for the training of government teachers and educational managers in Punjab, Pakistan. By synthesizing existing research, it highlights the specific dimensions in which TNA makes a profound impact:

Pedagogical Enhancement

TNA can identify gaps in teachers' pedagogical skills, instructional methodologies, and classroom management techniques. Addressing these gaps through tailored training interventions can lead to more engaging and effective teaching practices.

Adaptation to Technological Advances

As educational technology becomes increasingly integrated into classrooms, TNA helps government teachers stay abreast of these changes. By pinpointing areas of technological deficiency, TNA guides the development of training programs that empower teachers to effectively incorporate digital tools.

Alignment with Curriculum Initiatives

Curriculum standards evolve to meet the changing needs of society and the job market. TNA assists government teachers in understanding and implementing these reforms, ensuring their teaching approaches are relevant and up-to-date.

Motivation and Professional Growth

When government teachers and educational managers perceive that their development needs are acknowledged through TNA-driven training, it can lead to increased motivation, job satisfaction, and commitment to their roles.

Impact on Student Learning Outcomes

The link between teachers' training based on TNA and student learning outcomes is a critical aspect. Research demonstrates that targeted training interventions improve teaching and educational management quality, resulting in enhanced academic achievements among students.

Recognizing the undeniable significance of training, its effectiveness in achieving intended outcomes is equally crucial. Training Needs Analysis (TNA) serves as a pivotal tool, offering a detailed insight into an employee's knowledge, skills, and abilities. In the realm of Human Resource Development (HRD), TNA has gained prominence, ensuring organizational benefits. A systematic approach is essential in designing effective training. Preceding participation in training programs, it's imperative to discern employees' requirements, aligning training materials with workplace needs. The process involves several systematic steps. Commencing with a standardized Needs Analysis, it identifies the specific areas demanding training. Once TNA is conducted, training can be tailored to address these needs. The curriculum is then developed based on this analysis. Execution follows, along with training evaluation to measure goal attainment. A follow-up mechanism gauges training effectiveness and adapts to evolving needs over time.

The significance and advantages of this study to develop a systematic TNA model are numerous. It serves as a valuable tool for HR professionals and organizations, aiding in identifying knowledge gaps among workers and influencing their performance (Brown, 2002). The developmental progress of an organization relies heavily on its workforce and their skill enhancement to bridge knowledge gaps (Ludwikowska, 2018). TNA assists managers in planning training methods and implementing effective training sessions tailored to individual needs. The TNA process can identify key areas that require training, determine appropriate trainers, and establish schedules, contributing to improved organizational efficiency (Denby, 2010).

Effectiveness evaluation is crucial for TNA, given its role as a diagnostic tool. Organizations invest substantial resources in TNA, making it imperative to ensure that the resources allocated lead to enhanced employee skills and performance (Ludwikowska, 2018). Evaluating effectiveness involves tracking employees' performance post-training, and assessing their

ability to apply acquired skills. Feedback from employees who participated in training sessions is valuable, as they can offer insights into the quality and relevance of the training (Akther, Tariq, & Islam, 2018). Incorporating senior management in these assessments ensures alignment with organizational objectives.

According to Goldstein's work in 1993, the primary purpose of conducting a training needs analysis involves identifying areas requiring training, specifying the content to be taught, and determining the individuals who require training.

Training Needs Analysis defines objectives based on gap assessments, leading to well-structured training. It guides curriculum development and identifies the training's intended audience. Neglecting proper Training Needs Analysis, as highlighted by (Gautam, 2011), can result in various issues:

- Misinterpreting training as a solution to specific performance problems.
- Designing training with irrelevant or incorrect content, goals, and methods.
- Selecting the wrong audience based on analysis outcomes.
- Failing to achieve desired training outcomes.
- Wasting financial resources on ineffective training.

In conclusion, the quality of education relies heavily on skilled educators and educational managers. Properly planned and executed training, driven by TNA, contributes to improved performance, productivity, and organizational growth. TNA, when integrated effectively, provides a structured approach to identifying skill gaps and implementing tailored training interventions that align with both individual and organizational needs.

Research Statement

This research aims to address the dearth of comprehensive studies on Training Needs Analysis (TNA) models and practices in the Pakistani education sector, specifically focusing on the Quaid e Azam Academy for Educational

Development (QAED) in Punjab. By investigating the factors influencing TNA implementation within this context, the study seeks to develop a standardized TNA model that caters to the unique needs of teachers and educational managers. Through this effort, the research aims to bridge the gap between existing literature and the practical requirements of effective TNA processes in QAED, Punjab, ultimately contributing to enhanced professional development strategies and improved educational training practices in Pakistan.

Objectives of the Study

The study aims to create a Training Need Analysis (TNA) model specifically designed for evaluating the skills and knowledge requirements of teachers and educational managers within the School Education Department. The study's objectives encompass:

1. Conducting an extensive review of relevant literature pertaining to educational management theories, training needs, and skills and knowledge development among teachers and educational managers in developed nations.
2. Identifying contextual and cultural variables that exert influence over the adoption or adaptation of a TNA model within a specific country.
3. Formulating a conceptual model that harmonizes research findings concerning the training needs of teachers and educational managers, tailoring them to the Pakistani context.

Research Questions

1. What contextual or cultural distinctions between developing and developed countries might impact the appropriateness of adopting or adapting a TNA model for Pakistan?
2. In light of the contextual variations observed between developed and developing countries, what is the recommended training needs analysis model for Punjab?

Research Method

This was a qualitative study in which the researcher employed a Case Study strategy to investigate the research questions and attain an in-depth understanding of the phenomenon under examination. This strategy allows for a detailed examination of a contemporary phenomenon within its real-life context, particularly when the boundaries between the phenomenon and its context are not clear.

A case study involves a systematic process of examining the context, making observations, and collecting relevant data to facilitate analysis. The researcher adopted this strategy due to several reasons:

Uniqueness of the Study

Prior research lacks exploration within the context of a public sector teachers' training institute, specifically QAED. This research aims to fill this gap by proposing a systematic TNA model based on empirical findings.

In-Depth Exploration

A case study approach aligns with the need for an in-depth examination of the TNA system, including international and local practices, within QAED. This strategy is particularly suitable for a holistic study.

Holistic and Contextual Analysis

The case study design facilitates a holistic analysis of the complex phenomenon, accounting for context-specific factors and nuances.

The research employed a qualitative analysis method, considering the exploratory

nature of the study and the relatively small number of respondents. The qualitative approach allowed for in-depth exploration, observation, and understanding of contextual factors. Face-to-face and telephonic interviews were conducted to gather data, and the researcher's own experience within QAED for over 13 years as a Subject Specialist/Training Manager contributed valuable observations.

The research followed a logical sequence, beginning with a literature review to understand the training process, TNA, and the relationship between effective training and needs analysis. Based on this review, a conceptual framework was developed, guiding the data collection and analysis process. The research focused on developing a TNA model for teachers and educational managers in QAED.

The sampling technique used in this study was Purposive Sampling. In this method, participants are selected based on certain criteria or the judgment of the researcher. In the given context, specific teachers/educational managers and training managers were selected from QAED and the School Education Department, Punjab, for interviews. The criteria were to select a sample based on their training experience with QAED. The study's population encompassed the School Education Department which consists of 183,140 primary teachers as per data from SIS and almost 30,000 educational managers trained from QAED in Punjab, Pakistan. The sample drawn from the population consisted of 16 teachers/educational managers and 4 training managers from the School Education Department, Punjab, culminating in a total of 20 respondents. (Table 1)

Table 1

Sequence of Presentation of Data

Sample Groups (SG)	No. Of Respondents
SG 1: Teachers (TR)	08
SG 2: Educational Managers (EM)	08
SG 3: Training Managers/Trainers (TM)	04
Total	N=20

Interview tools were developed, with semi-structured interviews conducted to understand the perspectives of teachers and educational managers regarding training needs and barriers. The questions addressed various dimensions such as the need for TNA, barriers, curriculum, tools, and professional development.

Pilot testing was conducted to ensure the effectiveness of the interview tools and to make necessary adjustments. Interviews were conducted, audio-recorded, and transcribed for analysis. The qualitative data was analysed in three steps: (i) detailed analysis of individual responses, (ii) summarization of responses item-wise with propositions, and (iii) interlinking of propositions to form the final TNA model.

The data analysis technique used in this study is thematic analysis. In this technique, the researcher identifies and analyses recurring themes or patterns in the responses from participants. The responses to the questions are transcribed and then coded to identify common themes or categories that emerge from the data. These themes are then discussed and analysed to draw meaningful insights and conclusions from the data. Before analysis, the responses to questions are presented, followed by analysis, findings, and recommendations highlighting the recurring themes and providing interpretations based on the identified patterns in the responses. This indicates the application of thematic analysis to understand participants' perspectives and opinions related to managing change and the need for a systematic Training Needs Analysis (TNA) process.

The model and findings were validated through experts in training management at QAED, enhancing the credibility of the proposed TNA model. The research adhered to ethical measures, ensuring confidentiality and consent from participants. The entire research process followed a logical sequence, starting with a literature review and ending with the validation of findings and model.

Analysis and Key Findings

The interviews revolved around informal conversations, with the interviewer either recording the participants' answers or jotting them down for convenience. The researcher also allowed flexibility for any additional aspects to emerge during the interviews, stemming from the diverse experiences of the interviewees. One of these dimensions gathered responses that highlighted the need and importance of a proper TNA conducted before training as given below;

Need for TNA

In response to the question,

“Do you think TNA is important for teachers' training? Which type of approach should be followed to improve teachers' training in your opinion?” some of the responses received were;

- *“yes, TNA is very much important, as training needs change with time”*
- *“real-time training needs of teachers and educational managers will be fruitful to train them”*
- *“TNA is the start of training, it is helpful for any kind of training”*
- *“It is important for all sectors, if in the education sector, TNA is conducted in a systematic way, it can bring changes”*
- *“TNA is always helpful if done before training as in this way some areas might be highlighted which need more time and duration to be covered.”*

Participants expressed a clear desire for a consistent and systematic Training Needs Assessment (TNA). They believed it should have been an ongoing aspect of professional endeavours, ensuring that educational leaders remained in sync with global requirements. Feedback indicated that training should have been tailored; a one-size-fits-all approach was insufficient. Trainings should have been customized based on individual requirements. Furthermore, participants emphasized the significance of TNA, suggesting periodic evaluations, perhaps semi-annually.

Additionally, the availability of online training modules or need-specific courses was deemed essential, ready to be provided to educational managers according to their unique needs.

Beyond Academic Knowledge in Pursuit of Comprehensive Teaching: Teachers' Perspective

This study expands the understanding of training needs, indicating that challenges extend beyond content areas. It recognizes the potential of resolving additional issues to enhance teaching and learning practices.

In response to a question, "*In your opinion what are the skills, knowledge and competencies a teacher must have?*" responses were like this;

- *"Pedagogical skills*
- *Classroom management skills*
- *Understanding of child psychology*
- *Reporting skills*
- *Content mastery*
- *Paper setting skills*
- *Paper marking skills*
- *Practical teaching*
- *Content teaching"*

Teachers' perspectives indicate that they recognize the insufficiency of relying solely on theoretical knowledge or teaching content. They emphasize that being an efficient teacher necessitates the integration of various skills. They are of the belief that a true teacher possesses an array of capabilities that collectively empower effective teaching. Interestingly, teachers reject the notion that their responsibilities are limited to academic aspects. They strongly assert that beyond delivering lessons, they are accountable for comprehending students' behaviours, psychology, and individual needs. Furthermore, teachers acknowledge their role in managing diverse challenges like classroom dynamics, time allocation, crisis resolution, motivation cultivation, and assessment procedures. These challenges require specific skills and substantial knowledge, demanding appropriate learning methods. This insight holds the potential to be compared with the outcomes of the TNA process, evaluating

whether these identified needs are adequately addressed in the training programs.

Embracing Technology and Blended Learning

The design of TNA processes is vital for its success. Developing effective training modules requires addressing key questions related to the "why," "what," "when," "where," "who," and "how" of the training (Bin Arshad, 2015). These aspects contribute to shaping training programs that cater to employees' needs, promoting satisfaction and productivity. A combination of formal and informal training methods can be employed, and incorporating technology allows for efficient communication of training content (Comoro-Dili, 2012).

The COVID-19 pandemic highlighted the need for crisis management and IT skills, urging the inclusion of these aspects in training programs. This study necessitates the integration of technology in training methodologies. Adapting to global changes in teaching methods and technology, QAED adopts blended learning approaches. The study points to the need for enhancing technology skills for both participants and trainers.

In response to the question, "*With the changes in teaching methods and global perspectives, is there any need to make TNA a systematic and regular process for improving the quality of education?*" teachers' responses were noted as;

- *"Trainings should be online and face-to-face both.*
- *Teachers should be able to assess their own needs through any online resource and can have training as suggested in the analysis of TNA.*
- *Scientific methods should be adopted to assess needs as all the things should be considered like the performance of teachers, observing them that in which area they need trainings etc.*
- *Teachers should be able to assess their own needs through any online resource and can have training as suggested in the analysis of TNA.*

- *Make the technology in use.*
- *Make trainings a regular process rather than only at the time of induction or promotion.”*

The responses of teachers emerged several key themes regarding their perspectives on effective training approaches. Firstly, a consensus was observed on the importance of a dual training mode, blending both online and face-to-face methods. This acknowledges the need to accommodate diverse learning preferences and accessibility requirements. Additionally, teachers expressed the desire to take an active role in identifying their own training needs. The inclination towards employing scientific methods to assess these needs indicates a preference for a data-driven and systematic approach, considering factors such as teacher performance and specific areas requiring improvement. Notably, the call for integrating technology signifies an aspiration to enhance training experiences through digital tools. A common viewpoint emerged on the transformation of training from occasional events linked to induction or promotion to a continuous process, signalling an inclination towards continuous professional development. Overall, the responses underscore the teachers' endorsement of a well-rounded, learner-centred, and data-informed approach to teacher training that adapts to modern technological advancements and prioritizes ongoing growth.

Educational Managers' Perspective

Education managers also contribute significantly, driving positive change when equipped with leadership and management skills (UNRWA, 2013). Teachers and educational managers collectively form the backbone of any education system, pivotal in achieving national goals and improving educational quality. The 2030 vision places a strong emphasis on quality education and necessitates strategic planning, needs-based policies, and goal-oriented approaches to elevate both teachers' and students' performance. Headteachers and educational managers play a crucial role in supervising

educators and facilitating the teaching-learning process.

This study finds that educational managers should possess managerial, administrative, and leadership skills, which may differ from their initial qualifications. It indicates the requirement for comprehensive training addressing their evolving roles and responsibilities. Data reveals that current training practices lack TNA activities and fail to cover specific needs. It proposes the development of a TNA model to bridge the gap between training and educational managers' requirements.

Educational managers were asked in an interview, *“In your opinion what are the skills, knowledge and competencies an Educational Manager must have?”* their responses were recorded as follows;

- *“Management skills*
- *leadership skills*
- *Understanding human behaviour*
- *Reporting skills*
- *Aware of new rules and policies*
- *Supervision skills*
- *HR management skills*
- *Time management*
- *Content teaching*
- *Financial management skills*
- *Presentation skills”*

The responses obtained from educational managers regarding the essential attributes of an effective Educational Manager resulted in a multifaceted set of skills, knowledge, and competencies. These encompass strong management and leadership skills, crucial for organising efficient operations and guiding teams. The emphasis on understanding human behaviour underscores the significance of interpersonal insight and communication in managing educational environments. Proficiency in reporting and staying updated on new rules and policies speaks to the need for transparency and compliance in educational management. The highlighted supervision and HR management skills suggest a focus on overseeing personnel and fostering a conducive work environment. Time management underscores the necessity of efficient resource

allocation, while expertise in content teaching ensures a grasp of educational intricacies. Financial management skills signify careful resource utilization and presentation skills point to effective communication with stakeholders. Collectively, these responses underscore the diverse range of competencies required by Educational Managers, reflecting a blend of administrative, interpersonal, pedagogical, and organizational proficiencies which is not possible to assess without any proper and systematic TNA.

Context-Specific TNA Model: Training Managers' Perspective:

Several disparities set Pakistan apart from other nations using TNA for education, warranting a context-specific TNA model, particularly at QAED, Punjab:

- Pakistan's unique National Education Policy aligns education with state objectives.
- As a developing nation, limited resources hinder the adoption of international models.
- Inadequate education and training budgets preclude similar models.
- Teacher education isn't mandatory, and many educators lack pre-service training.
- The lack of HR expertise at Punjab's primary training institute undermines TNA.
- Political instability alters training priorities, impeding consistent progress.
- Pakistan's recruitment model lacks position-based placements, affecting suitability.

These findings highlight the imperative for a systematic Training Need Analysis model, tailored training designs, and technology integration to enhance the quality of education in Pakistan, particularly in Punjab. The recommendations underscore the importance of addressing evolving challenges and aligning training with contemporary needs for both teachers and educational managers.

Drawing from a comprehensive literature review, comparative analysis of various countries' Training Need Analysis (TNA)

models, and the current state of TNA in Pakistan's education sector, several key findings have emerged that will underpin the development of a new model:

- Training needs vary across countries, sectors, and contexts.
- TNA tools in high-performing countries align with the specific skills, knowledge, and attitudes required for targeted training. However, this study reveals that in Pakistan, especially at QAED in Punjab, where teacher training occurs, the TNA process lacks a systematic structure and requires a standardized approach.
- Effective training curricula should be based on TNA results to enhance teaching quality and achieve training objectives.
- Determining the training duration should be guided by the outcomes of TNA.
- An ongoing follow-up mechanism should be established based on performance evaluations and periodic TNAs.
- Comparing TNA models across different countries for teachers' training reveals that contextual differences, such as political, social, and psychological factors, drive diverse requirements for training. Each country's unique academic criteria for educators influence their distinct TNA models, tailored to fit their policies, rules, and cultural context. In the case of Pakistan's School Education Department Punjab, regional disparities in criteria preclude the adoption of a single model.
- Recognizing the pivotal role of professionally educated teachers in promoting national identity and education quality, Pakistan's Ministry of Education introduced the National Professional Standards for Teachers (NPSTs) in 2009. Among its 11 standards, Standard #9 underscores the importance of professional development for teachers. This standard emphasizes knowledge of a professional code of conduct, research methods for

continuous improvement, innovative teaching practices, and portfolio management. Nonetheless, these standards fall short of addressing the real-time needs of teachers and educational managers. This underscores the necessity of a standardized TNA model to bridge the gap.

Discussion and Recommendations

Call for Systematic TNA

Respondents emphasize the necessity of a systematic Training Need Analysis (TNA) process, integrating it as a continuous component of professional development. This study suggests regular TNA cycles, tailored training programs, and online courses aligned with participants' needs.

Importance of Customized Training Design

The study advocates for training designs that align closely with identified needs, enabling targeted and effective professional development. It leads to a shift in focus from generalized training to specific, participant-oriented approaches.

Benefits of QAED Trainings with TNA

Responses of the study stress the potential of incorporating TNA in QAED's training practices to enhance training effectiveness and participant satisfaction. It acknowledges the variety of training types and the need for customized TNA for each.

The evolving landscape of teaching and learning

Urging the establishment of continuous and standardized TNA practices, the study underlines the commitment of QAED training managers to adopt a regular and systematic TNA approach.

Developing a Context-Specific TNA Model

These distinctive factors emphasize the necessity for a TNA model tailored to Punjab's training institutes in Pakistan.

The data collected from teachers, educational managers, and training managers underscores the pivotal need for the development and utilization of a robust Training Need Analysis (TNA) Tool. This tool is critical for identifying training needs comprehensively and gauging their relative significance. Notably, the training curriculum is directly influenced by the factors identified during the TNA process. The curriculum, thus shaped, contributes to the formulation of the TNA Tool, incorporating the identified areas crucial for designing effective training.

Incorporating the perspectives of teachers, the developed TNA Tool illustrates that TNA might be absent from training practices altogether, or when conducted, participants find it challenging to adequately convey their needs. Consequently, the TNA Tool fails to inform training design, resulting in training sessions that either partially address needs or miss the mark entirely. The data reinforces the correlation between a TNA Tool aligned with professional development requirements and a training design tailored to qualifications, experience, passion, age, skills, and evolving global trends. Specific responses to questions highlight the significance of integrating Training Design and the TNA Tool as the third step in the TNA process.

Similarly, insights from educational managers mirror these patterns. The absence of effective TNA or its limitations in capturing participants' needs leads to poorly designed training programs. Aligning the TNA Tool with professional development requisites and global trends can remedy this.

From the perspective of training managers, and drawing on the researcher's extensive thirteen-year expertise at QAED, it becomes evident that TNA practices at QAED lack uniformity and need-based focus. Rather than being participant-centric, TNA Tools often stem from areas identified by educational experts, side-lining the genuine needs of potential trainees. Figure 1 reinforces the relationship between responses and the development of the TNA Tool within the training process, serving as a critical third step.

Overall, the data elucidates the critical role of an effective TNA Tool in guiding training needs and design. Alignment between the TNA Tool, training curriculum, and participants' requirements emerges as a pivotal aspect. This

interconnection forms the cornerstone of a meaningful TNA process, contributing to the creation of well-tailored, impactful training initiatives.

Figure 1

Factors of Data Collected from Teachers with Need-Based Tool for TNA

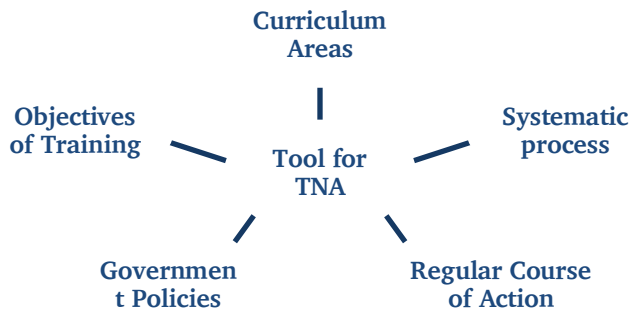
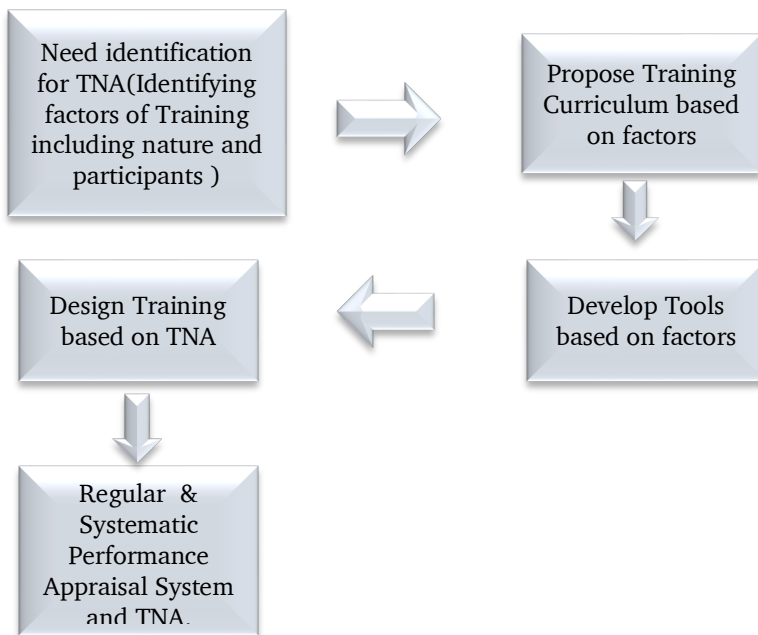


Figure 2

Core Model Proposed by the Researcher



The diagram presented above outlines a comprehensive model designed for the implementation of TNA within the education department, specifically focused on the Quaid-e-Azam Academy for Educational Development

(QAED). This model is constructed based on the insights and discoveries derived from the study.

Conclusion

A Training Needs Analysis (TNA) is a valuable tool that provides a detailed view of an employee's skills and abilities. This is crucial in the context of Human Resource Development (HRD), benefiting the organization. Creating effective training programs requires a careful approach. Following specific steps during this process is essential. The first step involves a standardized Need Analysis, identifying the areas that require training. This analysis pinpoints these areas through a gap assessment, which then shapes a well-organized training program.

The importance of a strong TNA model goes beyond just refining processes; it significantly improves educational

development. Using a diagnostic TNA tool along with a comprehensive TNA Model reveals differences between current practices and departmental goals. The ultimate aim of effective training is to improve educational programs, providing better support for students, educators, and all stakeholders.

This research introduces a systematic and ongoing TNA model that has the potential to transform the overall quality of education. A practical suggestion is for QAED to establish a dedicated HR Department. This step would not only streamline training processes for teachers and educational managers but also for all QAED staff, who play a central role in training efforts across Punjab.

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