

Training Needs Analysis for Educational Personnel in Higher Education

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Abstract

Educational personnel play a strategic role in supporting academic processes and institutional governance in higher education. However, professional development programs for educational personnel are often implemented without being based on a systematic assessment of competency needs. Numerous studies indicate that training programs not preceded by needs analysis tend to result in limited impact and low transfer of training outcomes to job performance. This study aims to describe the implementation of Training Needs Analysis (TNA) as a foundation for educational personnel development in higher education. This research employed a descriptive qualitative approach with a case study design conducted at the Faculty of Education of a public university in Indonesia. Data were collected through document analysis, including job analysis, workload analysis, employee performance targets, and institutional performance evaluations. The findings indicate that TNA is able to identify competency gaps across administrative, technical, and managerial positions and supports data-informed decision making in training planning and institutional accountability. This study emphasizes the importance of TNA as a strategic instrument for human resource development in higher education.

Keywords: Educational administration; Training needs analysis; Educational personnel; Higher education; Human resource development

Introduction

Higher education institutions do not rely solely on academic staff as the primary executors of the tri-dharma of higher education, but also on educational personnel who support academic services, administration, finance, and institutional governance. Educational personnel contribute directly to service quality, organizational effectiveness, and the achievement of institutional objectives. Therefore, the development of educational personnel competencies is a crucial aspect of educational human resource management.

In practice, education and training programs for educational personnel are often designed without being based on a systematic needs analysis. Training programs that are not aligned with job requirements and organizational goals may lead to ineffectiveness and inefficient use of resources. Research in the field of human resource development shows that training effectiveness is strongly influenced by the alignment between training content and actual job demands (Aguinis & Kraiger, 2009; Baldwin & Ford, 1988; Noe, 2020).

Training Needs Analysis (TNA) is widely recognized as a critical initial step in effective training planning because it helps organizations identify competency gaps between existing conditions and expected standards

(Goldstein & Ford, 2002; Noe, 2020). Through TNA, organizations can identify competency gaps between actual conditions and expected standards. In the context of higher education, TNA supports data-informed decision making and strengthens accountability in human resource governance. Although previous studies have widely discussed training and development in organizations, research focusing specifically on Training Needs Analysis for educational personnel in higher education institutions remains limited (Matlakala et al., 2024; Paddit, 2022). In many universities, training programs for administrative and technical staff are still implemented without a structured assessment of competency needs. As a result, training initiatives may not fully address the actual requirements of job functions or institutional governance.

Therefore, this study contributes by examining how Training Needs Analysis can be implemented as a systematic approach to identifying competency gaps among educational personnel. By analyzing institutional documents such as job analysis, workload analysis, and performance targets, this research provides an empirical illustration of how TNA can support more strategic and data-informed human resource development in higher education.

Educational human resource management refers to systematic efforts to plan, develop, and manage human resources to support the effective achievement of educational goals. In higher education institutions, educational personnel are involved in academic services, administration, financial management, facilities management, and information systems. Effective management of educational personnel requires continuous competency development aligned with organizational needs (Robbins & Judge, 2018; Sedarmayanti, 2017).

Training Needs Analysis is a systematic process used to identify gaps between employees' existing competencies and the competencies required to perform tasks effectively. TNA serves as the basis for designing targeted, efficient, and impactful training programs that enhance individual and organizational performance. Numerous studies indicate that training programs based on needs analysis demonstrate higher effectiveness compared to ad hoc training initiatives (Aguinis & Kraiger, 2009; Arthur et al., 2003; Salas et al., 2012).

Furthermore, the successful transfer of training outcomes to the workplace is strongly influenced by the relevance of training materials to actual job demands (Baldwin & Ford, 1988). Therefore, TNA functions as a key instrument to ensure that training programs genuinely address real work requirements.

In the higher education context, TNA has become increasingly important due to rising demands for service quality, accountability, and institutional governance. Empirical studies indicate that the implementation of TNA for university administrative staff supports more strategic and sustainable professional development planning in higher education institutions (Matlakala et al., 2024; Paddit, 2022). Through TNA, higher education institutions can align educational personnel competency development with institutional objectives and service standards.

Methodology

This study employed a descriptive qualitative approach with a case study design. This approach was selected to obtain an in-depth understanding of the implementation of Training Needs Analysis (TNA) as a foundation for developing educational personnel competencies within a higher education institution. The case study design was considered appropriate because the research focused on a specific organizational unit, namely the Faculty of Education at a public university in Indonesia.

The research was conducted at the Faculty of Education, Universitas Pendidikan Indonesia. The research subjects included all educational personnel represented in the faculty's Training Needs Analysis document, covering administrative, technical, and managerial positions. The analysis was conducted at the job-position level rather than at the individual level, meaning that this study did not assess personal performance but focused on competency needs based on functional roles.

Research data were collected primarily through document analysis as the main data collection technique. The analyzed documents included job analysis, workload analysis, employee performance targets, unit and faculty performance agreements, and performance evaluation documents. The document collection and analysis were conducted between December 2025 and January 2026 during the preparation of the Faculty of Education Training Needs Analysis document. Additional supporting information was obtained from documented inputs provided by faculty leadership during the TNA development process.

Data analysis was conducted through several stages. The first stage involved identifying competency demands by examining job duties and responsibilities based on job analysis and workload analysis documents. The second stage involved identifying competency gaps by comparing job demands and performance targets with existing competencies reflected in performance and evaluation documents. The next stage involved thematic grouping of training needs based on similarities in job functions and characteristics. The final stage involved drawing conclusions by relating the findings to concepts of Training Needs Analysis and educational human resource development. To ensure data trustworthiness, this study employed source triangulation by comparing and confirming findings derived from various interrelated official documents. Consistency among job analysis, workload analysis, performance targets, and TNA results served as the basis for ensuring the validity of the research findings.

Results and Discussion

The results of the Training Needs Analysis for educational personnel at the Faculty of Education indicate that competency development needs are not homogeneous but vary according to job characteristics and functional roles. From a total of eighteen educational personnel positions analyzed, training needs were grouped into seven main job categories based on similarities in roles and competency demands.

Table 1. Training Needs Analysis of Educational Personnel Based on Job Groups

No	Job Group	Required Core Competencies	Priority Training Needs
1	Academic and Student Services	Academic administration, service communication, public service	Service Excellence and Academic Administration Training
2	Human Resource Management	Human resource management, personnel administration, regulations	Human Resource Management Training and Office Administration Certification
3	Financial Management	Financial administration and reporting	Financial Management and Administration Training
4	Public Relations and Cooperation	Public communication, external relations	Public Relations Training

5	Educational Laboratories Facilities,	Laboratory management and operations Asset management and facility	Laboratory Management and Technical Training Asset Management and Facilities
6	Infrastructure , and Assets	maintenance	Maintenance Training
7	Information Technology and Archives	Information systems, network security, records management	Network & Information Security Training and Archives Management Training

Based on Table I, the academic and student services group demonstrated a dominant need for service excellence and academic administration training. This reflects increasing demands for high-quality services that are responsive to the needs of the academic community.

The human resource management and financial management groups required training emphasizing managerial, administrative, and regulatory compliance aspects. These needs are closely related to demands for accountability and transparency in faculty governance. Meanwhile, the public relations and cooperation group required enhanced competencies in public communication and external relations to support institutional image and collaboration networks.

Technical job groups, including educational laboratories, facilities and infrastructure, information technology, and archives, required more specific and technical training. Training for these groups was directed at ensuring operational effectiveness, system security, and sustainability of academic support services. The functional grouping of training needs demonstrates that Training Needs Analysis plays a crucial role in avoiding uniform approaches to competency development (Altuntaş et al., 2026; Nor, 2026; Suhada & Muafi, 2024). These findings reinforce the view that training effectiveness is largely determined by the alignment between training content and actual job demands (Aguinis & Kraiger, 2009; Baldwin & Ford, 1988; Noe, 2020).

The implementation of TNA enables faculties to establish training priorities more strategically and based on empirical data, allowing training resources to be allocated more efficiently (Cotes & Ugarte, 2021; Hayati & Hanifah, 2023). Furthermore, TNA supports transparent and accountable decision making in planning educational personnel development. Beyond identifying training needs, TNA also reveals broader patterns in educational personnel competency development. The findings indicate a shift in educational personnel roles from purely administrative functions toward supporting governance, service quality, and institutional performance.

From a governance perspective, TNA strengthens accountability principles in educational human resource management. Training assignment decisions are no longer based on subjective considerations but on systematically identified competency needs. In addition, TNA provides a clear evaluative foundation for assessing training effectiveness and its impact on employee and unit performance. Theoretically, these findings support the view that training effectiveness depends on the alignment between job needs and training design (Aguinis & Kraiger, 2009; Salas et al., 2012; Noe, 2020). Grouping training needs by functional roles highlights that a “one-size-fits-all” approach is not appropriate in higher education personnel management. By utilizing job analysis, workload analysis, and performance targets, TNA generates more accurate and

contextualized training needs mapping, reinforcing its role as a strategic instrument in educational human resource development.

From a practical perspective, this study contributes to faculty and university management by providing a basis for designing educational personnel competency development policies. TNA results can inform annual training plans, proposals for university-level training programs, and prioritization of professional certification. Moreover, TNA can serve as a foundation for developing structured career development systems for educational personnel aligned with organizational demands and the evolving higher education environment.

Strategic and Managerial Implications of Training Needs Analysis

Beyond identifying functional training needs, the findings of this study reveal broader strategic implications for educational human resource management in higher education institutions. Training Needs Analysis does not merely function as a technical diagnostic tool, but also serves as a managerial mechanism that links individual competency development with organizational performance and institutional goals.

The results indicate that training needs among educational personnel are closely associated with changes in institutional demands, particularly in relation to service quality, accountability, and governance. The prominence of service excellence, communication, and managerial competencies reflects a shift in the role of educational personnel from purely administrative support toward strategic contributors to institutional effectiveness. This shift aligns with contemporary perspectives in higher education management, which emphasize professional administrative services as a key determinant of institutional quality.

Furthermore, the implementation of Training Needs Analysis enables higher education institutions to integrate training planning with performance management systems. By aligning identified training needs with job analysis, workload analysis, and employee performance targets, institutions can ensure that professional development initiatives are directly connected to performance improvement. This integration strengthens the coherence between individual development plans, unit-level performance objectives, and institutional strategic priorities.

From a managerial perspective, Training Needs Analysis also contributes to more transparent and accountable human resource governance. Decisions regarding training participation and competency development are grounded in documented needs rather than subjective judgment or equal distribution practices. As a result, Training Needs Analysis supports fairness in access to professional development opportunities and enhances trust in human resource management processes among educational personnel.

In addition, the findings suggest that Training Needs Analysis can function as a preventive instrument in managing organizational risks. By identifying competency gaps early, institutions can anticipate potential weaknesses in administrative services, financial management, information systems, and laboratory operations. Proactive training interventions based on TNA may reduce operational errors, improve compliance with regulations, and enhance institutional resilience in responding to environmental changes.

From a theoretical standpoint, the findings reinforce human resource development theories that emphasize needs-based training design as a prerequisite for effective learning transfer (Aguinis & Kraiger, 2009; Salas et al., 2012; Noe, 2020). The differentiated training needs across functional groups confirm that uniform training approaches are insufficient in complex organizational settings such as higher education institutions. Training programs must be tailored to specific job demands and competency requirements to

achieve meaningful performance outcomes (Alsaadi & Awashreh, 2025; Darmani & Behkamal, 2025; Shannaq et al., 2025).

Practically, the results of this study provide a reference framework for faculties and universities seeking to institutionalize Training Needs Analysis within their human resource development systems. The functional grouping of training needs can be adopted as a practical model for organizing training priorities, budgeting training resources, and evaluating training outcomes. Moreover, Training Needs Analysis can support the development of structured career pathways for educational personnel by clarifying competency requirements associated with different functional roles (Bartholomew et al., 2025; Ngema, 2024; Polat et al., 2024).

Overall, this additional discussion underscores that Training Needs Analysis is not only relevant for planning training programs, but also plays a strategic role in strengthening educational human resource management, enhancing service quality, and supporting sustainable governance in higher education institutions.

Conclusion

This study aimed to examine the implementation of Training Needs Analysis (TNA) as a foundation for developing educational personnel in higher education. The findings demonstrate that TNA can effectively identify competency gaps across various functional positions and support data-informed decision making in training planning. By systematically linking job analysis, workload analysis, and performance targets, TNA provides a practical framework for aligning competency development with institutional needs. This study therefore highlights the importance of Training Needs Analysis is recognized as a strategic instrument in the development of educational human resources in higher education institutions (Noe, 2020; Matlakala et al., 2024). Future studies may expand this research by conducting comparative analyses across faculties or universities in order to further explore the role of TNA in supporting educational governance and institutional performance.

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