

## ENHANCING EDUCATION AND TRAINING EFFECTIVENESS FOR MICROTRANS PUBLIC TRANSPORTATION CREWS IN DKI JAKARTA

Nur Achmad Jabrial<sup>1</sup>, Mardiana<sup>2</sup>, Putri Dwi Jayanti<sup>3</sup>, Boy Laksmana<sup>4</sup>, Sukardi<sup>5</sup>

<sup>1, 2, 3, 4, 5</sup>Sekolah Tinggi Manajemen Transportasi Malahayati, Jl. Sungai Tirem No 43, Jakarta, 14150, Indonesia  
Email: [nurachmadjabrialshmm@gmail.com](mailto:nurachmadjabrialshmm@gmail.com)

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**Abstract.** This research examines the effectiveness of education and training programs for Microtrans public transportation crews in DKI Jakarta, focusing on improving operational efficiency and service quality. Through a mixed-methods approach combining qualitative interviews and surveys, key challenges were identified across six critical indicators: punctuality of training sessions, achievement of training targets, implementation of training outcomes, utilization of training benefits, post-training work performance, and behavioral changes. Findings reveal significant gaps, including delays in training sessions, missed training targets, and difficulties in applying acquired skills on the job. Recommendations include enhancing scheduling systems, aligning curricula with operational needs, and integrating practical training methods to bridge these gaps. Furthermore, fostering a culture of continuous learning and professional development among crews is essential to sustain improvements over time. By addressing these challenges, stakeholders can enhance crew competency, service reliability, and overall public transportation quality in DKI Jakarta.

**Keywords:** Public Transportation, Training Education, Operational Efficiency

**Abstrak.** Penelitian ini mengkaji efektivitas program pendidikan dan pelatihan awak angkutan umum Mikrotrans di DKI Jakarta dengan fokus pada peningkatan efisiensi operasional dan kualitas layanan. Melalui pendekatan metode campuran yang menggabungkan wawancara dan survei kualitatif, tantangan utama diidentifikasi dalam enam indikator penting: ketepatan waktu sesi pelatihan, pencapaian target pelatihan, implementasi hasil pelatihan, pemanfaatan manfaat pelatihan, kinerja kerja pasca pelatihan, dan perubahan perilaku. Temuan menunjukkan adanya kesenjangan yang signifikan, termasuk penundaan sesi pelatihan, target pelatihan yang terlewat, dan kesulitan dalam menerapkan keterampilan yang diperoleh dalam pekerjaan. Rekomendasinya mencakup peningkatan sistem penjadwalan, penyesuaian kurikulum dengan kebutuhan operasional, dan pengintegrasian metode pelatihan praktis untuk menjembatani kesenjangan ini. Selain itu, menumbuhkan budaya pembelajaran berkelanjutan dan pengembangan profesional di kalangan kru sangat penting untuk mempertahankan perbaikan dari waktu ke waktu. Dengan mengatasi tantangan-tantangan ini, para pemangku kepentingan dapat meningkatkan kompetensi awak kapal, keandalan layanan, dan kualitas transportasi umum secara keseluruhan di DKI Jakarta.

**Kata Kunci:** Transportasi Umum, Pendidikan Pelatihan, Efisiensi Operasional

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## INTRODUCTION

The effectiveness of education and training programs for public transportation crews is a critical aspect of urban transportation management, particularly in densely populated regions like DKI Jakarta. Efficient and reliable public transportation services are essential for ensuring mobility, reducing traffic congestion, and improving overall urban livability (Cascetta, 2013; Schiller & Kenworthy, 2017). However, the quality and impact of training programs on the performance of Microtrans public transportation crews in DKI Jakarta have been a subject of scrutiny and concern. Despite efforts to implement training initiatives, various challenges persist in achieving desired outcomes and maximizing the benefits of these programs (Green, 2021; Litman, 2016).

The primary objective of this research is to critically analyse and enhance the effectiveness of education and training programs designed for Microtrans public transportation crews in DKI Jakarta. By conducting a thorough examination of existing training practices and their outcomes, this study aims to identify key areas for improvement that can lead to enhanced crew performance and, consequently, improved service quality in public transportation. The research focuses on assessing the punctuality of training sessions, the achievement of training targets, the proper implementation of training outcomes, the utilization of training benefits, the post-training work performance, and the behavioral changes exhibited by the crews after training.

In the realm of transportation management, the effectiveness of education and training programs for public transportation crews represents a significant research gap. While there is recognition of the importance of ongoing education and skill development for enhancing service delivery and operational efficiency, empirical studies specifically targeting Microtrans crews in DKI Jakarta remain limited. Existing literature often highlights broader issues in transportation education and management but lacks detailed insights into the specific challenges faced by Microtrans crews and the tailored strategies needed to address these challenges effectively.

The urgency of addressing these research gaps lies in the direct implications for urban transportation systems in DKI Jakarta. As one of the most densely populated urban areas in Southeast Asia, DKI Jakarta faces persistent challenges related to traffic congestion, air quality, and urban mobility. Effective training programs for Microtrans crews not only improve operational efficiency and service reliability but also contribute to overall urban sustainability by encouraging greater use of public transportation. By enhancing crew performance through targeted training improvements, this research seeks to make a tangible impact on the quality of public transportation services and the daily commuting experiences of Jakarta's residents.

This study is expected to contribute significantly to the field of transportation management by providing empirical evidence and practical recommendations for enhancing the effectiveness of education and training programs tailored to Microtrans public transportation crews. By identifying specific areas for improvement and proposing targeted interventions, the research aims to fill existing gaps in knowledge and practice, thereby supporting the development of more robust and efficient urban transportation systems in DKI Jakarta. The findings of this research are anticipated to inform policymakers, transportation authorities, and stakeholders involved in public transportation management, guiding future initiatives aimed at improving service quality and customer satisfaction in urban environments (Lei et al., 2017; Tan & Taeihagh, 2020).

## **METHODS**

The research method employed in this study on improving the effectiveness of education and training for Microtrans public transportation crews in DKI Jakarta integrates qualitative research techniques with descriptive analysis. This approach was chosen to comprehensively explore and evaluate the current state of education and training programs, as well as to identify areas for enhancement within the specific context of public transportation management (Docherty et al., 2018; Meyer, 2016). Qualitative research was pivotal in this study as it allowed for a deep, nuanced understanding of the experiences, perceptions, and challenges faced by Microtrans public transportation crews. Through qualitative methods such as interviews and focus group discussions, key stakeholders including leaders, committee members, government representatives, and Microtrans operators were engaged. These interactions provided rich qualitative data that illuminated the complexities surrounding the implementation and effectiveness of education and training initiatives.

Central to the research methodology was the use of structured questionnaires distributed among 21 respondents representing various stakeholders involved in public transportation in DKI Jakarta. The questionnaire design was meticulously crafted to capture insights into multiple facets of the training programs, including punctuality, achievement of training targets, implementation of training outcomes, utilization of training benefits, post-training work performance, and behavioral changes observed among the crews. This quantitative data served as a foundation for statistical analysis, enabling the researchers to quantitatively measure the extent of challenges and gaps identified in the qualitative phase (Katz, 2015; Willig, 2014). Descriptive analysis was employed to systematically analyse the collected data, focusing on identifying patterns, trends, and significant findings related to the effectiveness of education

and training programs (Cascetta, 2013; Padgett, 2016). The analysis was structured around the identified indicators of training effectiveness, providing a structured approach to interpreting the survey results and deriving meaningful conclusions. By synthesising qualitative insights with quantitative findings, the research aimed to provide a comprehensive assessment of the current state of affairs while identifying clear opportunities for improvement in public transportation crew training.

Moreover, the research method prioritised the ethical considerations inherent in conducting research involving human participants. Measures were taken to ensure confidentiality, voluntary participation, and informed consent throughout the data collection process (Juškevičienė et al., 2021; Katz, 2015). This ethical framework not only safeguarded the rights of participants but also enhanced the validity and reliability of the research findings by promoting open and honest responses. The integrated approach of qualitative research and descriptive analysis was instrumental in uncovering the multifaceted challenges and opportunities within education and training programs for Microtrans public transportation crews in DKI Jakarta. By leveraging both qualitative depth and quantitative rigour, this methodological framework facilitated a robust examination of training effectiveness, laying the groundwork for informed recommendations aimed at enhancing operational efficiency, service quality, and overall public transportation management in urban settings (Kortüm, 2012; Saldana, 2014).

## **RESULTS**

The study aimed to evaluate and enhance the effectiveness of education and training programs for Microtrans public transportation crews in DKI Jakarta. This section presents the findings based on key indicators: punctuality of training, achievement of training targets, implementation of training outcomes, utilization of training benefits, post-training work performance, and post-training behavioral changes. These indicators were analysed to identify current challenges and opportunities for improvement within the education and training framework.

### **Indicator 1: Punctuality of Training**

The punctuality of training sessions is crucial for ensuring that crews receive timely and consistent education. From the survey data, it was found that 20.62% of Microtrans public transportation crews reported issues with punctuality in training sessions. Table 1 summarises the scoring and analysis of this indicator.

**Table 1.** Punctuality of training

<b>Indicator</b>	<b>Score</b>	<b>Analysis</b>
Punctuality of Training	20.62%	A significant portion of crews experienced delays in training sessions, indicating a need for improved scheduling and adherence to timetables.

**Indicator 2: Achievement of Training Targets**

Achieving training targets is essential for ensuring that crews acquire necessary skills and knowledge. The survey revealed that 28.55% of Microtrans public transportation crews did not achieve the set training targets. Table 2 provides a detailed overview of the scoring and analysis for this indicator.

**Table 2.** Achievement of training targets

<b>Indicator</b>	<b>Score</b>	<b>Analysis</b>
Achievement of Training Targets	28.55%	Many crews fell short of meeting the established training goals, indicating potential gaps in training content or delivery methods.

**Indicator 3: Implementation of Training Outcomes**

Effective implementation of training outcomes ensures that crews apply acquired knowledge in their daily operations. The data showed that 20.62% of Microtrans public transportation crews faced challenges in implementing training outcomes effectively. Table 3 presents the scoring and analysis for this indicator.

**Table 3.** Implementation of training outcomes

<b>Indicator</b>	<b>Score</b>	<b>Analysis</b>
Implementation of Training Outcomes	20.62%	Difficulties in translating training content into practical applications highlight the need for more hands-on training approaches or follow-up support mechanisms.

**Indicator 4: Utilization of Training Benefits**

Utilizing training benefits optimally ensures that crews derive maximum value from their education. Survey results indicated that 23.80% of Microtrans public transportation crews did not utilize the training benefits effectively. Table 4 summarises the scoring and analysis for this indicator.

**Table 4.** Utilization of training benefits

<b>Indicator</b>	<b>Score</b>	<b>Analysis</b>
Utilization of Training Benefits	23.80%	Suboptimal use of training benefits suggests a potential disconnect between training outcomes and practical job requirements, necessitating clearer alignment between education and operational needs.

### Indicator 5: Post-Training Work Performance

Post-training work performance reflects the immediate application of acquired skills in job roles. Findings indicated that 31.73% of Microtrans public transportation crews did not meet expected work performance standards post-training. Table 5 provides a detailed analysis and scoring for this indicator.

**Table 5.** Post-training work performance

Indicator	Score	Analysis
Post-Training Work Performance	31.73%	Lower-than-expected work performance post-training underscores potential gaps in skill retention or application, suggesting a need for ongoing support and refresher training initiatives.

### Indicator 6: Post-Training Behavioral Changes

Behavioral changes post-training reflects crew adaptation to new skills and knowledge. The survey revealed that 30.14% of Microtrans public transportation crews did not exhibit positive behavioral changes after training. Table 6 summarises the scoring and analysis for this indicator.

**Table 6.** Post-training behavioral changes

Indicator	Score	Analysis
Post-Training Behavioral Changes	30.14%	Challenges in fostering positive behavioral changes post-training indicate potential gaps in motivational strategies or reinforcement of new learning outcomes.

### Cross-Indicator Analysis

An integrated analysis of all indicators highlights interconnected challenges and areas for improvement within the education and training framework for Microtrans public transportation crews in DKI Jakarta. Common themes include the need for enhanced training delivery methods, clearer alignment of training outcomes with operational requirements, and ongoing support mechanisms to sustain learning impacts over time.

The findings underscore critical areas where education and training programs for Microtrans public transportation crews in DKI Jakarta can be strengthened. By addressing identified challenges such as punctuality of training, achievement of training targets, implementation of training outcomes, utilization of training benefits, post-training work performance, and behavioral changes, stakeholders can enhance crew competency, service reliability, and overall public transportation quality. The tables provided offer a structured view of survey results, aiding in the comprehension and strategic planning necessary for improving urban transportation management in DKI Jakarta.

## **DISCUSSION**

The discussion of the research findings on improving the effectiveness of education and training for Microtrans public transportation crews in DKI Jakarta explores the implications of the identified challenges and opportunities, offering insights into how these can be addressed to enhance overall service quality and operational efficiency.

### **Punctuality of Training**

The research revealed that a significant percentage (20.62%) of Microtrans public transportation crews in DKI Jakarta experienced issues with the punctuality of training sessions. This finding indicates a critical area where improvements are needed to ensure that crews receive timely and consistent education. Delays in training sessions can disrupt schedules and impact the effectiveness of learning outcomes. Addressing punctuality issues requires better coordination and adherence to training timetables by training providers and operators alike (Hora, 2019; Thibaut et al., 2018). Implementing stricter monitoring mechanisms and clear communication channels regarding training schedules could mitigate these challenges. Additionally, investing in automated scheduling systems or reminders may help in maintaining punctuality and enhancing overall training efficiency.

### **Achievement of Training Targets**

Another significant finding was that 28.55% of Microtrans public transportation crews did not achieve the set training targets. This indicates potential gaps in the alignment of training content with operational needs or challenges in the delivery and assessment of training outcomes. To improve the achievement of training targets, there is a need for a systematic review of existing training curricula to ensure they are comprehensive and relevant to current job requirements. Incorporating feedback from crews and industry experts into the curriculum design process can help tailor training programs more effectively (Austin & Jones, 2015; Peters, 2015). Moreover, establishing clear performance indicators and benchmarks for training success can provide crews with specific goals to work towards, thereby enhancing motivation and engagement during training sessions.

### **Implementation of Training Outcomes**

The study found that 20.62% of Microtrans public transportation crews faced difficulties in implementing training outcomes effectively in their daily operations. This highlights a disconnect between theoretical knowledge gained during training and its practical application

in real-world scenarios. Enhancing the implementation of training outcomes requires a holistic approach that includes hands-on training sessions, simulations, and on-the-job mentoring opportunities (Huang et al., 2021). Providing crews with practical exercises that simulate real-life challenges they may encounter on the job can better prepare them to apply their newly acquired skills. Moreover, fostering a supportive work environment that encourages experimentation and continuous improvement can help bridge the gap between training and application, ensuring that learning outcomes translate into tangible operational improvements.

### **Utilization of Training Benefits**

The research indicated that 23.80% of Microtrans public transportation crews did not utilize the training benefits optimally. This finding underscores the importance of ensuring that crews understand the value and relevance of their training to their job roles. Communication plays a crucial role in improving the utilization of training benefits, as clear articulation of how training impacts job performance can motivate crews to apply their skills effectively. Additionally, providing ongoing support and refresher courses can reinforce learning outcomes and help crews maintain proficiency over time. Encouraging a culture of continuous learning and professional development within the organization can further enhance the utilization of training benefits by fostering a mindset of growth and improvement among crews.

### **Post-Training Work Performance**

The study found that 31.73% of Microtrans public transportation crews did not meet expected work performance standards post-training. This suggests that while crews may acquire new skills during training, there are challenges in applying these skills effectively in their day-to-day responsibilities. Improving post-training work performance requires targeted interventions that support skill retention and application. Regular performance assessments and feedback sessions can help identify areas where additional training or support is needed. Moreover, integrating performance metrics into training evaluations can provide crews with tangible benchmarks for success, thereby enhancing accountability and performance outcomes.

### **Post-Training Behavioral Changes**

Behavioral changes observed among Microtrans public transportation crews post-training were found to be suboptimal, with 30.14% of crews not exhibiting positive behavioral changes. This indicates a need for strategies that foster a culture of continuous improvement and professional growth within the organization. Leadership plays a pivotal role in promoting

positive behavioral changes by modelling desired behaviours and providing recognition for achievements. Implementing incentives or rewards for crews who demonstrate proactive learning and improvement can further motivate behavioural changes post-training. Additionally, ongoing mentorship and coaching programs can provide crews with the support and guidance needed to adopt new behaviours and habits effectively.

### **Cross-Indicator Analysis and Integrated Approach**

An integrated analysis of all indicators reveals interconnected challenges and opportunities within the education and training framework for Microtrans public transportation crews in DKI Jakarta. Common themes include the importance of curriculum alignment with operational needs, the need for practical and hands-on training methods, and the value of ongoing support and reinforcement of learning outcomes. Addressing these challenges requires a collaborative approach involving stakeholders across the public transportation sector, including operators, training providers, regulatory bodies, and crew members themselves.

### **Recommendations**

The findings of this research underscore the critical importance of enhancing the effectiveness of education and training programs for Microtrans public transportation crews in DKI Jakarta. By addressing identified challenges such as punctuality of training, achievement of training targets, implementation of training outcomes, utilization of training benefits, post-training work performance, and behavioral changes, stakeholders can significantly improve crew competency, service reliability, and overall public transportation quality. Recommendations for improvement include:

- Enhancing training delivery: implementing automated scheduling systems and improving communication channels to ensure punctuality and consistency in training sessions.
- Curriculum review and alignment: conducting systematic reviews of training curricula to align with current job requirements and incorporating feedback from crews and industry experts.
- Practical application and support: integrating hands-on training sessions, simulations, and on-the-job mentoring opportunities to enhance the implementation and utilization of training outcomes.
- Continuous learning culture: promoting a culture of continuous learning and professional development through ongoing support, refresher courses, and leadership reinforcement of desired behaviours.

By implementing these recommendations, stakeholders can foster a more robust and effective education and training ecosystem that supports the professional growth and performance excellence of Microtrans public transportation crews in DKI Jakarta. This, in turn, will contribute to improved service quality, customer satisfaction, and overall urban transportation efficiency.

## CONCLUSION

This research provides a comprehensive assessment of the current state and challenges within the education and training programs for Microtrans public transportation crews in DKI Jakarta. The findings highlight significant areas for improvement, including punctuality of training sessions, achievement of training targets, implementation and utilization of training outcomes, post-training work performance, and behavioral changes. These challenges underscore the need for a more integrated and strategic approach to training delivery and curriculum development. Addressing these issues requires collaborative efforts among stakeholders, including training providers, operators, regulatory bodies, and crew members themselves. Recommendations include enhancing training delivery through improved scheduling systems and communication channels, aligning curricula with operational needs, and integrating practical training methods and ongoing support mechanisms. Furthermore, fostering a culture of continuous learning and professional development is essential to sustain improvements in crew competency and service quality over time. By implementing these recommendations, stakeholders can effectively enhance the effectiveness of education and training programs, ultimately improving service reliability, operational efficiency, and public transportation quality in DKI Jakarta. This research contributes valuable insights that can guide future initiatives aimed at optimizing workforce development strategies and enhancing overall urban transportation management practices.

## REFERENCE

- Austin, I., & Jones, G. A. (2015). *Governance of higher education: Global perspectives, theories, and practices*. Routledge.
- Cascetta, E. (2013). *Transportation systems engineering: theory and methods* (Vol. 49). Springer Science & Business Media.
- Docherty, I., Marsden, G., & Anable, J. (2018). The governance of smart mobility. *Transportation Research Part A: Policy and Practice*, 115, 114–125.
- Green, M. C. (2021). Transportation into narrative worlds. *Entertainment-Education behind the Scenes: Case Studies for Theory and Practice*, 87–101.
- Hora, M. T. (2019). *Beyond the skills gap: Preparing college students for life and work*. Harvard Education Press.

- Huang, J., Saleh, S., & Liu, Y. (2021). A review on artificial intelligence in education. *Academic Journal of Interdisciplinary Studies*, 10(3).
- Juškevičienė, A., Dagienė, V., & Dolgopolas, V. (2021). Integrated activities in STEM environment: Methodology and implementation practice. *Computer Applications in Engineering Education*, 29(1), 209–228.
- Katz, J. (2015). A theory of qualitative methodology: The social system of analytic fieldwork. *Méthod (e) s: African Review of Social Sciences Methodology*, 1(1–2), 131–146.
- Kortüm, G. (2012). *Reflectance spectroscopy: principles, methods, applications*. Springer Science & Business Media.
- Lei, A., Cruickshank, H., Cao, Y., Asuquo, P., Ogah, C. P. A., & Sun, Z. (2017). Blockchain-based dynamic key management for heterogeneous intelligent transportation systems. *IEEE Internet of Things Journal*, 4(6), 1832–1843.
- Litman, T. (2016). Transportation affordability. *Transportation*, 250, 360–1560.
- Meyer, M. D. (2016). *Transportation planning handbook*. John Wiley & Sons.
- Padgett, D. K. (2016). *Qualitative methods in social work research* (Vol. 36). Sage publications.
- Peters, R. S. (2015). *Ethics and education (routledge revivals)*. Routledge.
- Saldana, J. (2014). *Thinking qualitatively: Methods of mind*. SAGE publications.
- Schiller, P. L., & Kenworthy, J. (2017). *An introduction to sustainable transportation: Policy, planning and implementation*. Routledge.
- Tan, S. Y., & Taeihagh, A. (2020). Smart city governance in developing countries: A systematic literature review. *Sustainability*, 12(3), 899.
- Thibaut, L., Ceuppens, S., De Loof, H., De Meester, J., Goovaerts, L., Struyf, A., Boeve-de Pauw, J., Dehaene, W., Deprez, J., & De Cock, M. (2018). Integrated STEM education: A systematic review of instructional practices in secondary education. *European Journal of STEM Education*, 3(1), 2.
- Willig, C. (2014). Interpretation and analysis. *The SAGE Handbook of Qualitative Data Analysis*, 481.