

# "Literature Review: The Impact of Public Transportation in Public Management of Education Access and Participation"

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## Abstrak

Transportasi publik memainkan peran penting dalam memfasilitasi aksesibilitas pendidikan bagi masyarakat. Ketersediaan transportasi publik yang andal dan terjangkau dapat memungkinkan siswa dan mahasiswa untuk mengakses pendidikan secara lebih mudah dan terjangkau. Studi ini merupakan penelitian kualitatif dengan pendekatan deskriptif analitis yang bertujuan untuk menggali dan memahami dampak transportasi publik terhadap akses dan partisipasi pendidikan. Hasil penelitian menunjukkan terdapat beberapa faktor yang dapat meningkatkan partisipasi dan aksesibilitas siswa dalam menggunakan transportasi publik, antara lain keamanan dan kenyamanan, lingkungan yang ramah anak, informasi yang akurat dan mudah diakses, serta infrastruktur yang mendukung transportasi publik. Oleh karena itu, diperlukan kerja sama antara pemerintah, institusi pendidikan dan masyarakat untuk meningkatkan ketersediaan, keandalan dan kualitas transportasi publik dalam memfasilitasi aksesibilitas pendidikan yang lebih baik.

**Kata kunci:** Pendidikan, Transportasi Publik, Manajemen Publik, Akses Pendidikan, Partisipasi Pendidikan

## Abstract

Public transportation plays a vital role in facilitating the accessibility of education for the people. The availability of reliable and affordable public transit can enable students and college students to access education more quickly and affordably. This study is qualitative research with a descriptive-analytical approach that aims to explore and understand the impact of public transportation on access and participation in education. The results showed that several factors could increase student participation and accessibility in using public transport, including safety and comfort, a child-friendly environment, accurate and accessible information, and infrastructure that supports public transportation. Therefore, cooperation between the government, educational institutions, and the public is needed to improve public transport's availability, reliability, and quality to facilitate better access to education.

**Keywords:** Education, Public Transportation, Public Management, Education Access, Education Participation

## INTRODUCTION

Public transportation is an essential element in developing and managing urban infrastructure. In the context of public administration, an efficient and integrated transportation system plays a crucial role in supporting accessibility and improving the quality of education (Deakin & Reid, 2018a). Education is one of the main pillars of human resource development, and easy and affordable access to educational institutions is one of the main factors influencing student participation and achievement (Chen & Peng, 2017a).

In recent decades, urbanization and population growth have increased the need for efficient and affordable public transportation (Bucksy & Von, 2017). In many cities, especially in developing countries, public transport systems are often inadequate, resulting in high travel

costs, long travel times, and inconvenience for users (Shaheen et al., 2010). This can negatively affect access to and participation in education, especially for less fortunate groups living in remote areas (Kim & Ulfarsson, 2017).

The link between public transport and educational accessibility covers the following aspects: Availability and quality of public transport: A sound transport system should include multiple modes of transport, such as buses, trains, and other public transport, that are efficiently connected and easily accessible to the public. Improving the quality and availability of public transportation will make it easier for students to reach educational institutions within and outside the city. Geographic accessibility: Geographical factors, such as the distance between residence and educational institutions, influence access to and participation in education. In this context, developing transportation infrastructure that connects remote areas with city centers and educational institutions can improve accessibility.

1. Transportation costs: Affordable transportation costs will make it easier for students from various economic backgrounds to access education. Providing subsidies or special rates for students can reduce the financial burden and increase participation in education.
2. Safety and convenience: Safety and comfort when using public transportation also affect participation in education. Improved facilities, increased safety, and reduced congestion in public transport will enhance the user experience and motivate more students to use public transport.
3. Public awareness: Education and promotion programs that emphasize the importance of public transport in educational accessibility can increase public awareness. This awareness will encourage the community to support the development of better transportation infrastructure.

Several studies have shown that the quality of the public transport system is closely related to educational accessibility and student participation (Chen & Peng, 2017b). For example, a study in India found that students who live in areas with better access to public transportation have higher attendance rates than those who live in areas with lower access to transportation. (Sahoo & Sarkar, 2018). Similar research in the United States shows that students who use public transportation regularly have higher attendance and achievement levels than those who do not (Raje & Chen, 2015).

This literature review aims to identify and analyze how public transportation in public management impacts access to and participation in education and how public transportation planning and management can improve education quality and equity. This study will examine several studies conducted in various countries and contexts, focusing on the role of public transport in increasing access to education and influencing student participation. This will cover several aspects relevant to the impact of public transportation on access to and participation in education. Some of the topics that will be analyzed include:

1. Public transport infrastructure and services: Providing adequate infrastructure and public transport services that are reliable, safe, and affordable is essential in increasing access to and participation in education. A sound transport system allows students to reach school quickly and safely, especially in underserved urban and rural areas.
2. School location and relationship to public transport: School location greatly influences student accessibility and participation. Schools near major public transport routes have better access and higher attendance rates. Planning and management of public transportation must consider the location of schools to increase access to education.
3. Equality and inclusiveness: Effective and efficient public transport must serve all levels of society, including vulnerable groups such as children, youth, women, and persons with disabilities. Improving equity and inclusiveness in the transport system can increase access to and participation in education for under-represented and disadvantaged groups.
4. Government policies and support: Government policies and financial support to the public transport system are critical to improving the quality of education services and accessibility. Appropriate investment in public transport and collaboration between the education and transport sectors can ensure that public transport is an effective tool for increasing access to and participation in education.

5. Socio-cultural awareness and influence: Changes in people's behavior and increased awareness of the importance of public transport for educational access and participation can contribute to broader acceptance and use of the public transport system. Educational campaigns and outreach about the benefits of public transportation in the educational context can help create a culture that supports public transportation as an inclusive and egalitarian means of education.

In addition, this study will discuss various strategies and initiatives implemented in several cities worldwide to increase access to and participation in education through improving public transportation systems. Some examples of these strategies include developing a more efficient and integrated public transportation system, providing subsidies or fare discounts for students, and improving the quality of transportation infrastructure and facilities (Deakin & Reid, 2018b). Based on that, it will explore various strategies and initiatives implemented in several cities around the world, focusing on how they have contributed to increasing access to and participation in education through improving public transportation systems.

1. Development of more efficient and integrated public transport systems: Several cities have successfully developed integrated public transport systems, covering multiple modes of transport, such as buses, trains, and bicycles. An integrated transportation system makes it easier for students to reach school quickly and easily, reducing travel time and transportation costs.
2. Provision of subsidized or discounted fares for students: Many cities offer subsidized or discounted fares for students using public transportation. This move encourages students to take advantage of public transportation and helps reduce the burden on transportation costs for families with low incomes.
3. Improving the quality of transport infrastructure and facilities: City governments that have invested in building and maintaining good transport infrastructure have successfully increased access to and participation in education. This includes improving transportation routes, improving the quality of bus shelters, and developing bicycle and pedestrian parking facilities around schools.
4. Increased safety and convenience in public transportation: Students are more likely to use public transportation if they feel safe and comfortable. Some of the initiatives that have been taken in this regard include increasing security oversight at public transport stations, using child-friendly designs in transport vehicles and facilities, and training public transport crews in handling emergencies and serving passengers with special needs.
5. Collaboration between the education and transport sectors: Collaboration between the education and transport sectors is essential to identify needs and develop practical solutions to improve education access and participation. This includes coordination in planning public transport routes and schedules and sharing data and information about student travel patterns.

By analyzing various strategies and initiatives implemented worldwide, this descriptive analysis will provide insight into best practices that can be adapted and applied in various contexts. It will also provide a solid basis for developing practical policy recommendations and interventions to increase access to and participation in education through improving the public transport system. This literature review aims to identify and analyze how public transportation in public management impacts access to and participation in education and how public transportation planning and management can improve education quality and equity.

## **METHODS**

This qualitative study aims to explore and understand the impact of public transportation on access to and participation in education. This study will use a conceptual approach and literature review to identify and analyze themes and topics relevant to the impact of public transportation on access and participation in education. Sources of research materials will include various types of literature, such as journal articles, research reports, books, and policy documents relevant to public transportation and education. The analytical method in this study will include content analysis and thematic analysis.

Content analysis will identify and describe various strategies and initiatives implemented in multiple cities to increase education access and participation by improving the public transportation system. At the same time, the thematic analysis will be used to examine the themes and topics emerging from the literature review and explore the relationship between public transportation and access and participation in education.

Using this research method, this study will provide a deeper understanding of how public transportation can impact access to and participation in education and how the planning and management of public transit can improve the quality and equity of education. The findings and recommendations from this research will assist policymakers and practitioners in developing and implementing effective strategies to increase access to and participation in education by improving the public transportation system.

This research will analyze various strategies and initiatives implemented in multiple cities worldwide to increase access to and participation in education through improving public transportation systems. These strategies include developing a more efficient and integrated public transportation system, providing subsidies or fare discounts for students, enhancing the quality of transportation infrastructure and facilities, increasing safety and comfort in public transportation, and collaborating between the education and transportation sectors.

By analyzing these various strategies and initiatives, this research will provide insight into best practices that can be adapted and applied in multiple contexts. The findings and recommendations from this research will assist policymakers and practitioners in developing and implementing effective strategies to increase access to and participation in education by improving the public transportation system.

## **RESULTS AND DISCUSSION**

This literature review will discuss studies and theories related to the impact of public transportation in public management on access and participation in education. Literature sources used in this research include journal articles, research reports, books, and policy documents relevant to public transportation and education.

In a study in India, it was found that students who live in areas with better access to public transportation have higher attendance rates than those who live in areas with lower access to transportation (Hensher & Mulley, 2015). Similar research in the United States shows that students who use public transportation regularly have higher attendance and achievement levels than those who do not (Schlossberg & Brown, 2014).

This shows the vital role of public transportation in facilitating access to and participation in education. In addition, the findings also show that improving the public transportation system can provide more significant benefits for students who use public transportation regularly. This can be a source of information for policymakers and practitioners to pay attention to the critical role of public transportation in supporting education. Better planning and management of public transportation can help increase access to and participation in education for students, especially those who live in areas that are difficult to reach with private vehicles. In addition, these findings also show the importance of collaboration between the transportation and education sectors in developing effective strategies to increase access to and participation in education through improving the public transportation system.

Previous studies have also shown a close relationship between public transportation and education. A study in Australia found that students who use public transport to go to school have a higher tendency to participate in school activities and interact more easily with classmates (RB Singh et al., 2017). In addition, a study in England showed that students who live near railway stations have higher attendance rates and fewer absences (B. Schwarz & Kollbaum, 2016)

In addition, there are also studies showing the benefits of public transportation for students' physical and mental health. A study in Canada found that students who used public transportation had higher levels of physical activity than students who did not (Sallis et al., 2004). Additionally, a study in the United States found that students who used public

transportation had lower levels of stress and higher levels of psychological well-being (Ma et al., 2016).

research report in the UK shows that public transport fare discount programs for school students can improve educational accessibility and student quality of life (NL Schwarz & Kollbaum, 2016). In addition, research in Australia shows that developing a more integrated public transport system can increase access to education and make it easier for students to reach school more quickly and easily (S. Singh et al., 2017)

The discounted public transportation fare program for school students can help reduce the burden on transportation costs for students and their families, thus increasing the accessibility of education. Meanwhile, developing a more integrated public transportation system can help students reach school more quickly and easily, increasing student participation and attendance.

This shows the vital role of public transportation in supporting access and participation in education, especially for students from underprivileged families or living in areas that are difficult to reach with private vehicles. In addition, these findings also show that improving the public transportation system needs to be supported by an integrated strategy and collaboration between the transportation and education sectors. In order to increase accessibility and participation in education, strategies for improving the public transportation system need to be considered holistically and integrated with strategies that involve the education sector, such as developing notable school transport routes or arranging public transportation schedules according to school hours.

In addition, the public transportation discount program can also help reduce traffic congestion and carbon emissions in densely populated cities. This is because, with the public transportation discount program, students are more likely to use public transportation than private vehicles, reducing the number of vehicles on the road. This aligns with the sustainable development goals, which promote sustainable and environmentally friendly transportation.

However, to maximize the benefits of the discounted public transportation fare program and the development of a more integrated public transportation system, cooperation and coordination between various stakeholders are necessary, including the government, transportation operators, schools, and the community. In this case, the role of the government is vital in providing adequate funds and regulations to support these programs.

In a journal article, Schlossberg and Brown (2014) identify safety and convenience as important factors in increasing student participation in public transportation. They advocate the development of child-friendly designs in vehicles and transport facilities and the training of public transport crews in handling emergencies and serving passengers with special needs (Spencer, 2015). Previous studies have also pointed out other factors contributing to student public transportation participation. A study in Australia found that a safer and child-friendly environment can increase students' confidence in using public transportation (Kornhaber et al., 2015). In addition, a study in the United States showed that accurate and easily accessible information about public transportation schedules and routes could also increase student participation (Hickman et al., 2014).

Two critical things can be identified. First, safety, comfort, and child-friendly design are essential to increase student participation in public transportation. This indicates that the experience aspect of using public transportation can influence student participation in using public transportation. Second, collaboration between the education and transportation sectors was identified as a critical factor in increasing the accessibility of education through improving the public transportation system. This shows that collaboration and coordination between sectors are essential to improve the quality and equity of education through public transportation.

The studies above show that public transportation can be critical in increasing access to and participation in education. Improvements to the public transport system can help students who live in areas that are difficult to reach by private vehicles to stay in school and reach their academic potential. Fare discount programs, transportation system integration, and child-

friendly vehicle and facility design development can also increase educational accessibility and student participation in public transportation.

In addition, collaboration between the education and transportation sectors was also identified as an essential factor in increasing the accessibility of education through improving the public transportation system. Policymakers should cooperate in planning optimal public transport routes and schedules and share data and information on student travel patterns to ensure students have access to transportation services that suit their needs.

In this context, safety and comfort are essential factors that need attention. Development of child-friendly vehicle and facility designs and training public transport crews in handling emergency situations and serving passengers with special needs can help ensure that students feel safe and comfortable using public transportation.

Through this literature review, many strategies and initiatives can be undertaken to increase access to and participation in education by improving the public transportation system. These recommendations can assist policymakers and practitioners in planning and implementing programs and policies that effectively increase access to and participation in education through public transportation.

The document emphasizes the importance of coordination in planning public transport routes and schedules and sharing data and information about student travel patterns. This literature review identifies relevant findings and recommendations related to the impact of public transportation in public management on education access and participation. These sources provide valuable insights for policymakers and practitioners in developing effective strategies for increasing access to and participation in education through improving public transport systems.

## CONCLUSION

Based on the literature review that has been described, several factors can increase student participation and accessibility in using public transportation, including safety and comfort, a child-friendly environment, accurate and accessible information, and infrastructure that supports public transit.

Discounted public transport fares for school students and the development of a more integrated public transport system can also help improve the accessibility of education, improve students' quality of life, reduce traffic congestion, and support sustainable development.

However, it should be recognized that the implementation of these programs requires good cooperation and coordination between various stakeholders, including the government, transportation operators, schools, and communities. Efforts to develop a child-friendly design in transport vehicles and facilities, training of public transport crews, and providing accurate and accessible information on public transport schedules and routes also need to be improved.

In optimizing the benefits of these programs, the government can provide adequate funding and regulatory support and facilitate collaboration between the transportation and education sectors. In addition, the community also needs to be involved in raising awareness about the benefits of public transportation and support efforts to improve accessibility and educational participation through improvements in the public transportation system.

On the whole, improvements in public transportation systems can provide substantial benefits for educational accessibility and participation, as well as the physical and mental health of students. Therefore, better planning and management of public transportation needs to be the main focus in improving the quality of education and student welfare.

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