



## Educational Public-Private Partnerships: Key Elements for Success

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### Abstract

The goal of this article is to determine the variables influencing the adoption of PPPs (public-private partnerships) in the field of education.

Design, technique, and strategy this systematic literature analysis looked at 21 articles on PPPs in the education sector using Scopus and the Staples and Niazi (2007) approach. To find research gaps and offer details on important concerns in the cases, content analysis is used.

Findings: The research has determined the key success determinants for PPPs in the education sector across 12 nations, exposing implementation issues and differing levels of success. They demonstrate how crucial it is to have well-defined goals, good communication, and strong collaborations between the public and private sectors in order to succeed. Future initiatives can be guided by the comprehensive understanding of PPP implementation in education that these insights help to provide.

Originality/value: The crucial success criteria found in the application of PPPs in education across many nations may offer scholars, practitioners, and policymakers a thorough global perspective.

**Keywords:** Public-Private Partnerships, Critical success factors, PPP in education, Education policy, Content analysis

### Introduction

In terms of public funding, the importance of Public-Private Partnerships (PPPs) in social policy domains like education has grown during the last ten years. While the public sector handles finances, policy changes, quality assurance, and public mandates in the public interest, the private sector improves efficiency, productivity, and outcomes. According to Larocque (2008), education PPP programs are private sector endeavors that help public schools obtain resources. While school management measures may improve curriculum and teacher resources, government voucher programs can let children attend private schools. Teacher training, curriculum design, operational services like vouchers, subsidies, grants, and allowances, as well as infrastructure like school building, are all managed, maintained, and supported by PPPs (Robertson et al., 2012). A common PPP model is the voucher system, where students use state-issued vouchers to cover tuition and other costs at private (or public) schools (Ansari, 2021; Barrera-Osorio et al., 2012).

The expansion of PPP in the educational sector has been the subject of existing study from a number of angles. PPP was successfully implemented during the pandemic to support education (Walsh et al., 2020). Numerous research have looked at student satisfaction as facility recipients (Babatunde and Perera, 2017) and one model of PPP education implementation (Chattopadhyay and Nogueira, 2014). Party collaboration methods and indications of imprecision in policy implementation have been the subject of several research that have examined the failure of educational PPP implementation (Cancedda et al., 2014; Wokadala and Barungi, 2015). However, a number of studies and books have been published by international organizations that support PPPs in education, including the World Bank, Education Development Trust, and Asian Development Bank. These publications examine the details of PPP procedures and the advancements made in the field of education (Kim et al., 2011; Larocque, 2008).

Numerous countries have conducted in-depth studies on the effectiveness of PPPs in the social and infrastructure sectors (Amović et al., 2020; Babatunde et al., 2012; Osei-Kyei et al., 2017). There is, however, a dearth of research on the variables influencing the execution of global educational PPPs. To learn more about this subject, Helmy et al. (2020) conducted interviews with project participants in Egypt. In order to assess the effectiveness of PPPs in different areas of education, Twinomuhwezi and Herman (2020) looked into how



stakeholders view the success or failure of universal secondary education. But it was centered on Uganda. In order to determine the elements impacting the implementation of PPPs in education, a thorough literature study of international research was conducted. The variables of PPP implementation were then investigated by looking at programs from different nations using content analysis.

## Methodology

To find, assess, and examine published research on PPP education, a systematic literature review was carried out in accordance with Staples and Niazi's (2007) methodology. This analysis was restricted to PPP practitioners' achievements and shortcomings. A search for "Public-Private Partnership" and education-related phrases like education, learning, and students was the first step in the data mining process. 11,670 different publications, including books, essays, and reports, were found in the first data search. A total of 218 documents were produced after this study was further filtered to only include English-language publications and articles having PPP-related keywords. The Scopus filter functionality was used in this screening and filtration process. The writers then checked the documents to make sure they were complete and found 53 documents. A comprehensive evaluation of the full magazine revealed that only 21 articles were suitable for analysis due to the extensive implementation of PPP education activities. Content analysis does not use standard metrics and concludes the message data in an objective and rigorous manner (Holsti, 1969) (Chua and Zhang, 2020). The 21 articles that were found were compiled into a data table for this investigation. The data findings are shown in this table starting with the nations that carry out PPP projects, the programs that are carried out, the success or failure of project execution, and the variables that influence PPP project practice. The PPP project practices of the 12 countries are examined in light of the findings.

## Findings

Project success can be measured in a number of ways, such as whether the project's execution matches the predetermined time, cost, target, and objectives, or whether the results work as planned and offer the desired advantages. Thus, the accomplishment of the PPP program's aims and objectives serves as the basis for determining whether it was successful or not. This study examined 12 countries using data based on research. According to a World Bank estimate from 2019, six nations—Benelux (6.3%), Brazil (6%), South Africa (5.9%), the United States (5%), South Korea (4.7%), and Colombia (4.5%)—spent more than 4% of their GDP on education. China (3.5 percent), Ireland (3.3 percent), Singapore (2.7 percent), Egypt (2.6 percent), Pakistan (2.5 percent), and Uganda (1.5 percent) are the other six countries with education spending below 4 percent. The PPPs in each nation's educational system are covered in the section that follows.

### 1. Belgium

The Agency for School Infrastructure (AGION), DBFM, and normal public agency subsidies oversee the 1.5 billion Euro education PPP known as "Scholen van Morgen" (Schools of the Future) in Belgium (Willems, 2014). In accordance with this strategy, school boards will own contemporary, environmentally friendly school buildings that are built and maintained by the private sector for 30 years (Van Gestel et al., 2014). For the term of an agreement, school boards pay availability fees based on performance. But their conclusions meant they got the building for nothing. The school board and the public sector oversee 167 programs in total (Willems, 2014). This effort was further facilitated by the accountability requirements of the PPP program. The private companies AG Real Estate and BNP Paribas Fortis, as well as the Flemish government's investment business AGION, helped make the program a success.

### 2. Ireland

In 2002, the Irish Pilot Schools Program built schools using PPPs (O'Shea et al., 2020). Over the course of 25 years and V63 million, five schools were built using the design, build, finance, and maintain (DBFM) method. Nonetheless, PPP projects and school development have persisted. According to O'Shea et al. (2020), the initiative failed to evaluate the value for



money (VFM), which is a crucial step in PPP governance, according to the Comptroller and Auditor General (C&AG). C&AG assessed VFM following the launch of the coordinated schools. According to Reeves and Ryan (2007), Jarvis Project Ltd.'s PPP procurement is 8–13% more expensive than traditional procurement. Institutional backing is necessary for a robust VFM. To guarantee the long-term sustainability and accountability of PPP initiatives, the PPP standards call for a cost-benefit analysis, a VFM evaluation, and a post-project review. In order to handle evaluation, procurement, and post-contract management based on the lessons learnt, Ireland implemented VFM guidelines for PPP procurement in 2006. The National Development Finance Agency (NDFA) was subsequently created. 2010, 2011, 2013, 2014, and 2019 saw the completion of the 2010 NDFA education "package."

### 3. United States

PPP programs are widely used in the US education industry, especially boarding schools. PPPs were used in 332 student housing projects throughout all 50 states between 1995 and 2014 (Levey et al., 2020). In Virginia, Florida, Georgia, and California, PPPs created social infrastructure. This student housing plan was made possible by these laws. PPPs are limited by state law to administrative matters pertaining to social infrastructure.

### 4. Colombia

PPPs were used by the School Concession (CEC) to build schools in Bogota, Colombia. Between 1999 and 2003, 25 concession schools serving 40,000 pupils were established (Edwards Jr et al., 2017). In deprived communities, CECs teach disadvantaged youngsters. Evaluations, audits, bureaucratic accountability, and performance-based contracts all contributed to the program's success.

### 5. South Korea

A collaboration initiative to advance education in South Korea is called H-JUMP School. Low-income South Korean youngsters have been receiving education in nearby learning facilities since 2011. The roles of the participating parties are clearly specified. "Joining Us to Maximize our Potential" (JUMP) as an NGO provides quality mentors. Instructors are hired and managed by the public sector, and up to 75% of the program is funded by Hyundai (Hong and Kim, 2018). Every stakeholder agrees that trust is essential to the program's partnership and sustainability.

### 6. China

PPPs in China's education sector are dependent on both government backing and market forces. Their administration is funded by private companies, governments, and individuals (Pillay et al., 2013). China highlights the connection between industry and vocational education in the 1996 Vocational Education Act (Remington and Yang, 2020). This structure and high-level demands for contemporary vocational education are the first steps toward successful collaborations. Flexibility, shared duties, and recognition of vocational training enhance the integration of school and industry and provide graduates with worthwhile job opportunities. The collaboration between the Hengan Corporation and the Quanzhou Institute of Technology in Fujian Province serves as one illustration. This specialist school supports online sales of sanitary items and trains its suppliers in automated production procedures (Remington and Yang, 2020). The specialized school distributes graduates to its 40 board member businesses and trains them in industry-wide capabilities. With assistance from the lighting industry organization and the township government, Zhongshan Polytechnic established a lighting industry school in Gu Zhen township, Zhongshan city, in 2009 (Remington and Yang, 2020). By offering training in skills relevant to the industry and distributing graduates to member businesses, this PPP in China's talent development environment demonstrates how to prosper.

### 7. Singapore

PPP projects pertaining to education include the University Town-Warren in the residence halls of Singapore Management University (SMU) and the National University of Singapore (NUS) (Kim and Kwa, 2020). The university town program built and oversaw student





housing in 2007 and 2008. While multiple large structures and major pipelines were being built, the business had to continue operating. This PPP-based project to increase government-funded services and construct new student housing was shelved by NUS and SMU. PPPs were not feasible because of pricing restrictions and student loan reduction. The commercial sector's willingness to work with the public sector was hampered by the lack of business profit potential, stringent pricing, and the desire to lessen the financial load on students. Public sector resistance and pressure to withdraw caused the social infrastructure PPP to collapse. This story illustrates how public support and regulation can affect whether PPP attempts in education are successful or not.

## 8. Pakistan

The goal is to give underprivileged students and communities access to education through PPP projects (Ansari, 2020). PPP education is promoted for low-income people by the Punjab Education Foundation (PEF). Partner colleges have over 2.6 million students enrolled. Some programs offer subsidies and vouchers for education. For example, in 2005, the Education Voucher Scheme gave 1650 schools \$3.5-7 per student (Ansari, 2020). Then, in 2006, 3700 institutions received monthly subsidies for students from the Foundation Assisted Schools, which ranged from US\$3.5 to US\$9.6. According to Ansari (2021), the New Schools Program constructed 2404 schools in impoverished communities and offered \$3.5 to \$9.6 in pupil funding. In 2016, the PEF privatized education in public institutions that were failing through the Public Schools Support Program. Subsequently, Sindh adopted the Punjab initiative. The Sindh Education Foundation (SEF) provides teacher training and student subsidies to enable local businesspeople to establish and run private schools. After 1.5 years, the program's 2,000 schools enrolled 100,000 students with improved exam results (Barrera-Osorio et al., 2022). PEF and SEF monies are used by these effective projects. Every ongoing program was closely watched.

## 9. South Africa

In the Western Cape of South Africa, nonprofit, fee-free, and nonselective schools for underprivileged pupils are run under the Collaborative Schools Pilot Project (Feldman, 2020). PPP legislation legitimized this concept, which was applied by five schools in 2016. However, resistance from the South African Democratic Teachers' Union (SADTU), the African National Congress, the Progressive Professional Forum, the South African Communist Party, and Equal Education caused this to be postponed. SADTU contended that the absence of interest from the corporate sector could have enhanced the initiative's viability and that the Join Education Trust, the third party that oversaw and assessed the pilot program, ought to have provided updates on student achievement. Explaining how the Western Cape Department of Education (WCED) would innovate and improve school development in this project is necessary, as is outlining the joint accountability of the funder, schools, and WCED (Feldman, 2020).

## 10. Brazil

Like China, two private companies and the Brazilian government are building technical schools. According to Chattopadhyay and Nogueira (2014), the State Secretariat of Education (SEEDUC) and two sizable Brazilian firms, Oi Telecom for NAVE and Grupo Po de Acucar for NATA, fund the two public high schools in Rio de Janeiro. Public schools in Brazil differ from NAVE/NATA schools in that both use creative methods to teach subjects. Both of them incorporate instruction in their private partner industries and follow the regular curriculum. Those that graduated had greater choices. Collaborative management helped the initiative succeed. While SEEDUC is in charge of the traditional curriculum, the private sector is in charge of technical education in Rio de Janeiro. Partners communicate and make decisions all the time. Comprehensive teacher contacts are essential to the NATA and NAVE co-management models (Chattopadhyay and Nogueira, 2014).

## 11. Egypt

PPPs are used into Egypt's education reform to boost its competitiveness in the global labor

market. Multinational companies can get involved in the Egyptian education industry through the Egyptian Education Initiative (Helmy et al., 2020). A private language school was established in 2016 by the Ministry of Finance's central PPP unit. In 2019, 500 million LE was spent on 910 classrooms. Specialized education that was relevant to the market was offered by the Ministry of Education and Technical Education and the American Group. The University of Egypt's vocational education satisfies industry requirements. The success of PPP education programs is influenced by a variety of factors (Helmy et al., 2020). First, private investment in Egypt's education sector was drawn in by a clear PPP plan. The Ministry's satellite PPP units will carry out these projects. PPPs are also encouraged by laws, rules, and financial assistance.

## 12. Uganda

Enhancing the quality of education is one of Uganda's development goals. The PPP made secondary education universal in the majority of Uganda's public institutions in 2007 (Wokadala and Barungi, 2015). All underprivileged pupils are eligible for secondary school vouchers or subsidies under this strategy (Barrera-Osorio et al., 2020). 11,007 public and 1,785 private secondary schools were among the participating institutions (Crawford, 2017). 873,476 students took part in the program between 2007 and 2014. The program improved the effectiveness of school administration. The public sector's explicit agreements, goals, and objectives to lower the cost of access to education has an impact on this (Wokadala and Barungi, 2015). Nevertheless, PPPs' efficacy in Uganda did not result in a rise in student enrollment.

## Discussion

Crucial elements for PPP implementation success in the field of education Several important program success elements are highlighted in the reports of PPP implementation in different countries. Only when these requirements are met can goals and objectives be achieved. The following list of crucial success characteristics is based on prior PPP education initiatives in different countries. Seven important elements that affect PPP implementation in the education sector are identified by this investigation. See fig 1.



Source: By authors

**Figure 1. Critical Success Factors Component of PPP Implementation in the Education Sector**

### a) Strong dedication and collaboration

Strong dedication contributed to the success of the H-JUMP Schools in South Korea (Hong and Kim, 2018) and the Universal Secondary Education (PMU) program in Uganda (Wokadala and Barungi, 2015). Program success is influenced by political, private, and public commitment (Amović et al., 2020; Babatunde et al., 2012; Osei-Kyei et al., 2017; Twinomuhwezi and Herman, 2020). Frequent communication lessens information asymmetry, clarifies policy, and builds trust. All project participants must put in a lot of effort (Chan et al., 2004; Li et al., 2005; Mannan, 2014), develop cooperative conduct—which is



required and crucial in partnership settings (Dalcher and Lebel, 2010), and achieve common goals (Brito et al., 2014) in order for the project to be successful. PPP education service initiatives in Brazil, South Korea, and Belgium benefited from this partnership. Tasks, competencies, and agreements should be divided through collaboration in the PPP process map (Amović et al., 2020). The project's completion may be delayed by a lack of dedication and vision. To achieve these goals, governments, corporations, and civil society must collaborate. Accessibility, affordability, and educational results can all be improved by a strong public-private cooperation.

## **b) Accountability**

Transparent procedures must be used to hold PPP partners responsible (Twinomuhwezi and Herman, 2020). Financial responsibility is a key component of PPP programs in education (Osei-Kyei et al., 2017). The success of Schools of the Future in Belgium can be attributed to a three-pronged accountability system: sharing and discussing information, reporting to parliament, and legislative approval of particular rules for key programs (Willems, 2014). The government's obligation to implement laws and procedures that prevent injustice and the misuse of authority, as well as to carry out a program for the good of society, are intimately tied to accountability (Willems, 2014). Accountability for PPP efforts is necessary for good governance (Helmy et al., 2020). Stakeholder mistrust, ineffective resource use, and subpar education can all be caused by a lack of accountability. Accordingly, in order to stop corruption and the misappropriation of project funds, openness and proactive public disclosure are necessary (Chang et al., 2021).

## **c) Standard Operating Procedure (SOP) and unambiguous regulations**

Formal laws and regulations are required, just like with other PPPs. In countries lacking PPP law, ministerial or governmental regulations may make it difficult to execute PPP. Investors must create long-term projects in accordance with relevant laws and regulations for PPPs to be successful (Amović et al., 2020). In order to create effective PPPs, investors might need assistance understanding the numerous regulations. PPP education programs are supported by US state legislation passed under the agreement and their legislatures, as well as China's 1996 Vocational Education Act (Remington and Yang, 2020) (Levey et al., 2020). According to Kim and Kwa (2020), Singapore outlawed university housing fees for public goods. National or regional regulations are determined by a nation's laws and constitution. For PPP growth, center-local interactions are essential (Mao, 2023). If these rules impose limitations that are hard to carry out locally or don't satisfy local standards, local governments may depart from them. As a result, both the federal and local governments ought to include clear, impartial, and workable rules, such as risk matrices in solicitation documents (Da Cruz and Marques, 2012). Uncertain laws may lead PPP education to fail (Petersen, 2010). The way the government manages unsolicited proposals (USPs) and competitive tendering should likewise be covered by these rules. Private businesses that seek commercial prospects have created USPs (Yun et al., 2015). Since the industry offers social services, it is important to carefully consider whether to accept or reject unsolicited bids. While some countries have responded to PPP and USP infrastructure successfully, others have not yet done so (Marques, 2018). Due to less competitive scrutiny, USPs continue to have greater expenses or partiality and are vulnerable to transparency, accountability, and collusion. Laws and regulations should address these problems because the government should prioritize improving education. Inadequate regulation leads to unclear partner obligations, possible conflicts, hold-ups, and extra expenses.

In the meanwhile, if SOPs for education ensure PPPs, they turn into performance standards. By defining processes, roles, and competences, standardization and transparency reassure investors and remove uncertainty (Amović et al., 2020). This promotes PPP projects in an environment that is conducive to business. SOP education is valued in Irish society. VFM evaluations decrease budget efficiency in the absence of SOPs (O'Shea et al., 2020; Reeves and Ryan, 2007). The focus of this case study is output standardization. Standard operating





procedures waste resources by ensuring effective cooperation and communication.

#### **d) Well Proper planning and design**

PPP education's concept, process, and structure need to be thoroughly thought out and decided upon. In Egypt, a straightforward design has drawn funding for the building of private schools (Helmy et al., 2020). PPP success is influenced by good design (Osei-Kyei et al., 2017). The design integrates risk sharing (OECD, 2012) and procedures (Roehrich et al., 2014) to enable the commercial and public sectors to carry out the agreed-upon program. The unclear project specifics caused the WCED to lose private support. PPPs that are successful take the implementation context into account. A PPP-friendly operational environment is therefore necessary. If the operational environment cannot be altered, the PPP design must be updated. Poor planning and design can cause PPP ventures to fail, particularly when it ignores stakeholder input, budgetary restrictions, timeframes, and community needs. For a firm's legal structure to be implemented successfully, cooperation, communication, and teamwork are essential.

#### **e) Comprehensive comparison analysis**

An early cost-benefit analysis is crucial, as evidenced by the early failure of a PPP education effort in Singapore. The project's technical feasibility study (Babatunde et al., 2012) and cost-effectiveness comparisons of development expenses with other designs also used this comparative analysis. Labor, materials, and technology availability all have an impact on technical viability (Helmy et al., 2020). Technical viability must take requirements flexibility into account. A long-term PPP contract's technical requirement should change while preserving its initial goal. Project development may be delayed by requirements changes (Klijn, 2010). A comparative analysis should take project viability and monetary worth into account in addition to technical feasibility (Cruz and Marques, 2014). The public sector can achieve VFM if this can lower the cost and quality of private sector initiatives (Rakić and Radenović, 2011). The public sector ought to contrast these purchases with traditional PPPs and other effective, public-focused models. Project viability must be taken into account in technical assessments. Sustainability anticipates the threats and possibilities that could change the project. Ineffective partnerships may arise from a lack of a thorough analysis evaluating the PPP model's effectiveness, efficiency, and sustainability in comparison to other conventional models.

#### **f) Support from the public**

Trade unions, civic society, non-governmental groups, and the media must all promote PPPs (Osei-Kyei and Chan, 2015). PPP education gives broad goals first priority because education benefits the public. In South Africa's Western Cape, where many communities opposed PPPs, their implementation proved complicated (Feldman, 2020). This emphasizes how public criticism in other areas has to be strengthened. Participation from the community enables them to understand the advantages and effects of PPP projects, enabling candid assessment (Helmy et al., 2020). Program planners can win support by communicating effectively. PPP schemes are unattractive due to government corruption and a lack of transparency (Osei-Kyei et al., 2017). Consequently, it is essential to convey the goals of building public infrastructure and services. Raising awareness and educating people can boost program support. A lack of public support may be the cause of PPPs' failure in education. Meanwhile, rather than a preference for business over government, support for PPPs is based on economic concerns and faith in the government (Boyer and Van Slyke, 2019). Consequently, PPP efforts can benefit from raising public awareness, sensitivity, and capacity.

#### **g) the establishment of a reliable PPP Unit**

A private partner's PPP knowledge and dedication are demonstrated by the establishment of a PPP unit (Amović et al., 2020; Farquharson and Yescombe, 2011). The United Nations Economic and Social Council asserts that national governments must support PPPs for them to be successful. To demonstrate this commitment, enhance government capability and project quality, and promote public-private communication, PPP units must to be developed



(Helmy et al., 2020). Instead of only serving as an advising body, the unit should have clear direction and decision-making authority (Sanghi et al., 2007). According to Amović et al. (2020), the entity is required to retain in-country PPP information for projects, contact possible bidders, and create, manage, and evaluate PPPs. The unit should help recruit banks, financial institutions, and private partners as well as establish, define, and implement PPP policies. An effective PPP unit may help stakeholders, including the education sector, create and execute guidelines, and track and assess performance. Only with an authentic PPP unit can educational PPPs be successful.

## Conclusion

The key success criteria of both successful and unsuccessful educational PPP projects in different nations include learning values. By examining a range of context-specific experiences, researchers can pinpoint the elements that contribute to project success. Error prevention and PPP project strategy education were improved with the help of this knowledge. It is crucial to analyze both successful and unsuccessful PPPs in the field of education. When putting educational PPPs into practice, failed initiatives might reveal mistakes, issues, and traps. Risk concerns that were overlooked during the design or implementation phase can be found through an examination of these PPP projects. Success stories from Belgium, South Korea, Brazil, Egypt, and Uganda can be examined to learn from them. Furthermore, South Africa and Singapore might teach us a lot about the project's failure. However, Ireland's PPP didn't succeed until it learned from its mistakes. PPP implementation in different nations can highlight the elements that make education PPPs successful.

This study has a number of policy implications. Institutional infrastructure and the ability to create a reliable and efficient PPP unit should be given top priority by policymakers. To carry out educational PPP projects, this unit needs the required tools, staff, and power. Second, in order to minimize misuse, poor management, and inefficiency, education PPP projects need well-defined rules and standard operating procedures. Third, to make sure PPP initiatives are effective and accountable, officials should spend money on planning, designing, and evaluating performance. Since this study started with an empirical investigation of different approaches, it did not include development theory, sociocultural context, or school-level observations. The sociopolitical and economic environments of each nation can then be contrasted.

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