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Transforming Cambodian Education: Full-Time Learning, Technology, and Language Integration for Public Schools

Nimol Thuon[1,2], Panhapin Theang[1]
[1]One to Many Research Center, One to Many Cambodia, Cambodia
[2]Institute of Technology of Cambodia, Cambodia

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ABSTRACT

The Cambodian government has announced a significant educational reform to transition public schools to full-time learning by integrating computer and English or Chinese language classes. This initiative is designed to enhance the quality of education and better prepare students for the demands of the modern world. This paper compares these proposed changes by examining practices in five private schools already implementing full-time education and advanced technological and multilingual programs. By evaluating the academic performance, resource availability, and overall educational outcomes of these private schools, this study aims to provide actionable recommendations for successfully adopting these strategies in public schools. The research involved surveys of 565 respondents, including students, teachers, school administrators, parents, and policymakers, and in-depth interviews with 50 key stakeholders. Key findings include strong support for full-time education, higher levels of technology integration, and better multilingual education in private schools. These findings will inform policymakers, educators, and stakeholders about the potential impacts and necessary steps to ensure the successful implementation of these educational reforms in Cambodia's public school system.

Corresponding Author:

Nimol Thuon
One to Many Research Center, One to Many Cambodia
Email: nimol.thuon@gmail.comGod

1. INTRODUCTION

Cambodia's educational landscape is transforming with the government's recent announcement to transition public schools to a full-time learning model. This ambitious reform aims to integrate computer science and English or Chinese language classes into the standard curriculum, marking a significant step toward modernizing the education system. As Cambodia seeks to better prepare its students for the demands of a rapidly changing global economy, this reform holds the potential to significantly improve the quality of education available to public school students.

However, the Cambodian education system has faced numerous challenges, including limited resources, inadequate infrastructure, and disparities in educational quality between urban and rural areas [1]. Public schools, especially in rural areas, have struggled with limited resources, underdeveloped infrastructure, and a part-time learning structure that has hindered students' academic progress. These issues have contributed to a growing educational gap between public and private institutions, with the latter benefiting from full-time learning models, access to advanced technology, and multilingual programs. Private schools have consistently outperformed their public counterparts, with higher academic achievements and better-prepared graduates [2]. This discrepancy raises an important question: Can the success of private schools in Cambodia be replicated in the public school system?

This paper explores the potential benefits and challenges of transitioning public schools to full-time education by conducting a comparative analysis with private schools. The research will focus on key areas, including the impact of full-time learning on academic performance, the role of technology in enhancing educational outcomes, and the importance of multilingual education in preparing students for a globalized world [3], [4]. Specifically, integrating computer science into the curriculum is particularly pertinent in today's digital age, where technological literacy is increasingly becoming a prerequisite for success in various fields [5]. Furthermore, including English or Chinese language classes aims to equip students with essential linguistic skills, enabling them to access a broader range of educational and professional opportunities [6]. By examining the practices and outcomes of private institutions already adopting full-time schooling, we can glean valuable insights and practical recommendations for public school implementation.

The significance of this study extends beyond academic inquiry. The findings provide valuable insights for policymakers, educators, and stakeholders about the potential impacts of these reforms that help bridge the quality gap between public and private schools. By identifying the strengths and weaknesses of the current public education system and drawing lessons from the private sector, we aim to offer actionable recommendations to ensure a smooth and effective transition to full-time education in Cambodian public schools [4].

2. LITERATURE REVIEW

2.1 Full-Time Education Models Globally

Full-time education models have been widely adopted in many countries worldwide, with significant evidence supporting their effectiveness in improving academic outcomes and student engagement. According to a study by the Organization for Economic Cooperation and Development (OECD), countries implementing full-time education systems tend to have higher student performance in international assessments such as PISA [7]. Full-time education provides students with more instructional hours, allowing for a deeper understanding of subjects and more opportunities for extracurricular activities, which contribute to the overall development of students. South Korea, for instance, has a rigorous full-time education model emphasizing academic achievement and additional tutoring sessions after school that contribute to the country’s high-performance assessment.

Finland similarly emphasizes longer school days with less formal homework to reinforce deep learning rather than rote memorization [8].

Despite the clear benefits, full-time education models are not without challenges. For instance, countries like the United States have seen debates about whether more extended school days genuinely improve educational outcomes or merely contribute to student burnout [9]. Similarly, full-time models may strain resources in countries with limited educational funding, which requires significant infrastructural investment and teacher training. These global examples highlight the importance of contextualizing the implementation of full-time education models to ensure they meet the needs and capacities of individual countries.

2.2 Benefits of Multilingual and Technology Integration in Education

Multilingual education is essential in a globalized world where the ability to communicate in multiple languages is a valuable asset. Studies have shown that bilingual or multilingual individuals often have cognitive advantages, such as better problem-solving skills and mental flexibility [10], [11]. In Cambodia, where Khmer is the national language, adding English or Chinese classes can open up numerous local and international student opportunities. English is widely regarded as the global lingua franca, and proficiency in English can enhance students' access to higher education and employment opportunities worldwide [12]. Similarly, Chinese language skills are becoming increasingly valuable due to China's growing economic influence [13]. By implementing multilingual education, Cambodian public schools can better prepare students for the globalized job market and foster cross-cultural understanding. However, implementing multilingual education comes with its own set of challenges. In many developing countries, a significant barrier is the lack of qualified teachers proficient in multiple languages. Furthermore, there are concerns about whether students from lower socioeconomic backgrounds can benefit equally from multilingual education, as they may lack exposure to other languages outside of school [14]. In Cambodia, where Khmer is the primary language, incorporating English and Chinese can open up vast opportunities, but the shortage of qualified language teachers and unequal resource distribution between urban and rural areas presents a challenge.

Technology integration into the educational process has been shown to enhance learning experiences and outcomes significantly. Research indicates that technology can facilitate personalized learning, provide access to vast resources, and foster student collaboration [15]. For instance, interactive whiteboards, educational software, and online learning platforms can make lessons more engaging and accessible, catering to different learning styles and needs. Moreover, technology in education is crucial for preparing students for the digital economy. As the job market increasingly demands digital literacy, incorporating computer science into the curriculum ensures that students acquire essential skills relevant to the modern workforce [16], [17]. However, studies have shown that introducing technology without a coherent pedagogical framework can lead to mixed results and education inequalities, especially in underserved communities. In Cambodia, public schools face similar challenges, as many lack the infrastructure or funding to

support widespread technological adoption. Additionally, teacher training programs may need to be updated to ensure educators can effectively use these new technologies [14].

2.3 Comparative Studies on Private vs. Public Education in Cambodia

Comparative studies between private and public education systems provide valuable insights into the effectiveness of different educational models. These studies typically examine various aspects such as academic performance, resource availability, teaching methodologies, and student outcomes. In many regions, private schools often have distinct advantages over public schools, which can be attributed to several key factors [18].

Private schools frequently exhibit higher academic performance compared to public schools. This disparity can be attributed to several reasons, including smaller classes, more rigorous academic standards, and a greater emphasis on individualized instruction. Studies have shown that students in private schools often outperform their public school counterparts on standardized tests and other academic benchmarks. For instance, a study conducted in Cambodia revealed that private school students had significantly higher exam pass rates and overall academic achievements than public school students [19]. One of the critical differences between private and public schools is the availability of resources. Private schools generally have more financial resources, which allows them to invest in better facilities, teaching materials, and extracurricular activities. This financial advantage enables private schools to create a more conducive learning environment that can cater to the diverse needs of students. In contrast, public schools in Cambodia often face budget constraints that limit their ability to provide adequate educational resources. These constraints can lead to overcrowded classrooms, insufficient teaching materials, and a lack of access to modern technology [20].

Due to bureaucratic constraints, private schools can adopt innovative teaching methodologies that may not be possible in the public school system. For example, many private schools employ project-based learning, experiential learning, and other student-centered approaches that can enhance critical thinking and problem-solving skills. These methodologies often result in more engaged and motivated students who are better prepared for higher education and the workforce. In contrast, public schools may be limited by standardized curricula and traditional teaching methods that do not always cater to students' individual needs [21].

Integrating technology into the classroom is another area where private schools often excel. With more financial resources, private schools can invest in advanced technological tools such as interactive whiteboards, computers, and educational software. These tools can facilitate personalized learning, access vast resources, and foster student collaboration. In Cambodia, private schools integrating technology into their curriculum have significantly improved student engagement and learning outcomes [22]. On the other hand, many public schools struggle with outdated technology and limited access to digital resources, hindering their ability to provide a modern education.

Multilingual education is critical in a globalized world where the ability to communicate in multiple languages is a valuable asset. Private schools in Cambodia often

offer robust language programs, including English and Chinese, and the national language, Khmer. These programs are designed to develop students' linguistic skills, enhancing their academic and professional opportunities. In contrast, public schools may have limited language offerings and less effective language instruction due to a lack of qualified teachers and resources [13]. The differences in academic performance, resource availability, teaching methodologies, technology integration, and multilingual education often translate into better overall student outcomes in private schools. Private school students are more likely to pursue higher education and secure better employment opportunities. They also tend to have higher levels of academic achievement, critical thinking skills, and global awareness. Several success stories from private schools in Cambodia highlight how these institutions have provided a high-quality education that prepares students for future challenges [23].

Understanding the differences between private and public schools provides valuable insights for policymakers aiming to improve the public education system. Public schools can enhance their educational outcomes by adopting best practices from private schools. Recommendations include increasing funding for public schools to improve resource availability, adopting innovative teaching methodologies, integrating technology into the curriculum, and expanding multilingual education programs. The Cambodian government must collaborate with private sector stakeholders and international organizations to facilitate these changes. These partnerships can provide the necessary expertise, funding, and support to ensure the successful implementation of educational reforms. This is crucial as private schooling is more costly and can create a socioeconomic divide meant to benefit only those who can afford higher tuition; therefore, policymakers must translate these practices into a more equitable and inclusive public school model. Moreover, continuous monitoring and evaluation of the implemented strategies are essential to make data-driven decisions and adjustments as needed [24], [25].

3. METHOD

The methodology of this study involves a comprehensive and mixed-method approach to data collection, analysis, and comparison to investigate the potential benefits and challenges of transitioning Cambodian public schools to a full-time education model that integrates technology and multilingual education. The methodology consists of several key steps, including survey administration, interviews, literature review and secondary data analysis, comparative analysis, data analysis, and formulating recommendations to ensure quantitative and qualitative data analysis.

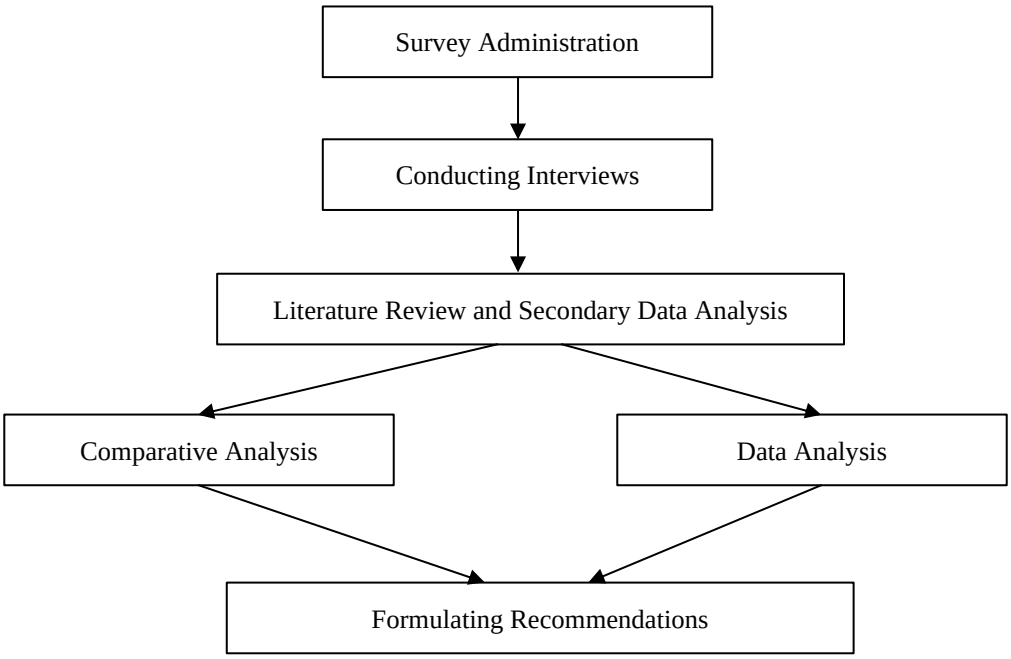

Figure 1. The overall process of methodology

3.1 Survey Administration

Surveys were meticulously designed to comprehensively understand current educational practices and perceptions regarding the proposed changes. The surveys targeted many stakeholders, including students, teachers, school administrators, parents, and policymakers. A stratified random sampling method was employed to ensure a diverse and representative sample across different school types (public and private) and regions (urban and rural areas). Out of 600 distributed surveys, 565 valid responses were collected, resulting in a high response rate of over 94%. The survey content covered various aspects, such as the current state of education, opinions on transitioning to full-time education, the role of technology in classrooms, and attitudes toward multilingual education. The surveys included a mix of closed-ended questions for quantitative data and open-ended questions for qualitative insights, ensuring that statistical analysis and thematic exploration could be conducted.

Surveys were distributed online and in paper format to ensure broad accessibility and high response rates. Online distribution was facilitated through Google Forms, email invitations, and social media platforms, while paper surveys were distributed in schools and community centers. A pilot survey was conducted with 50 respondents to test the reliability of the survey instrument. Feedback from the pilot study helped refine question wording and improve clarity. The survey's validity was maintained using previously validated scales for technology integration, multilingual education, and academic performance adapted to Cambodian education. The survey responses were entered into a database for analysis, with quantitative data being prepared for statistical analysis and qualitative responses being transcribed for thematic analysis.

3.2 Conducting Interviews

To complement the survey data, in-depth interviews were conducted with 50 key stakeholders, including school principals, education experts, government officials, and representatives from private schools. These interviews aimed to delve deeper into the insights gathered from the surveys and to obtain more nuanced information about the implementation and impact of full-time education, technology integration, and multilingual education programs.

Participants were selected based on their expertise, experience, and role in the education sector, ensuring a wide range of perspectives was captured. The interviews followed a semi-structured format, allowing for open-ended responses that provided rich qualitative data. Interview guides were developed to ensure consistency while allowing interviewees flexibility to elaborate on relevant topics. Interviews were conducted offline through face-to-face meetings and via Zoom to accommodate participants' availability and preferences. Each interview was recorded (with permission) and transcribed for analysis.

The interview questions were designed to cover the following key areas to ensure consistency:

1. Perceptions of Full-Time Education: What are the benefits and challenges of transitioning to full-time education?
2. Technology Integration: How is technology currently used in your school, and what are the potential benefits and challenges of further integration?
3. Multilingual Education: What languages are currently taught, and what are the perceived benefits and challenges of multilingual education?
4. Educational Practices: What teaching methodologies are employed, and how do they impact student learning?
5. Resource Availability: What resources are available to support education, and what additional resources are needed?
6. Professional Development: What training and development opportunities are available for teachers, and how can they be improved?

Analysis of the interview data involved coding responses to identify recurring themes and patterns. These themes were then analyzed to provide deeper insights into the critical areas of interest and identify best practices and strategies for public schools.

3.3 Literature Review and Secondary Data Analysis

An extensive literature review was conducted to gather background information and identify best practices from existing research, policy documents, and case studies. This review provided a solid theoretical foundation for understanding the practical aspects of full-time education, technology integration, and multilingual education. Academic journals, government reports, international organizations, policy documents, and case studies were reviewed to identify successful models of full-time education, effective technology integration strategies, and the benefits of multilingual education. Additionally, secondary data from educational reports, statistical databases, and previous studies were analyzed to complement the primary data collection efforts, such as Cambodia’s Ministry of Education, Youth and Sports data. These data include enrollment statistics, resource

allocation, and academic performance trends and are crucial for benchmarking public schools against private ones. This secondary data provided important context and helped validate the survey and interview findings.

3.4 Comparative Analysis and Data Analysis

The comparative analysis focused on identifying key differences and similarities between public and private schools in Cambodia. Key variables for comparison included academic performance (exam pass rates, literacy rates, GPA), resource availability (number of computers, smartboards, internet access), teaching methodologies (project-based learning, traditional teaching methods), and language education practices (languages offered, proficiency levels). Data from surveys and interviews were categorized based on these key variables. Quantitative data were compiled into spreadsheets for statistical analysis, while qualitative data from interviews were transcribed and coded for thematic analysis. Public schools' data were benchmarked against private schools' data to identify performance gaps and areas for improvement. Comparative charts and tables were created to visualize differences in key variables. Detailed case studies of successful private school models were developed to illustrate practical approaches and best practices that could be adapted for public school implementation.

The study used quantitative and qualitative data analysis techniques to understand the research findings comprehensively. Descriptive statistics (mean, median, standard deviation) were used to summarize survey responses and secondary data. Inferential statistic (t-tests) was applied to determine significant differences between public and private schools in key performance indicators and to explore relationships between variables such as technology use and academic performance. Qualitative data analysis involved coding interview transcripts and identifying recurring themes and patterns related to full-time education, technology integration, and multilingual education. Textual data from open-ended survey responses were systematically analyzed to extract meaningful insights. Detailed case studies of private schools were developed to highlight successful strategies and practices.

3.5 Formulating Recommendations

The final step involved synthesizing the findings from the data analysis to formulate actionable recommendations for the transition to full-time education, technology integration, and multilingual education in Cambodian public schools. Findings from the quantitative and qualitative analyses were integrated to provide a comprehensive understanding of the research questions. Best practices and strategies identified from private schools were highlighted as potential approaches for public school implementation. These recommendations aimed to address the specific challenges identified in public schools and leverage the successful practices observed in private schools. The recommendations were presented in a clear and actionable format to guide policymakers, educators, and stakeholders in implementing the proposed educational reforms.

This methodology provides valuable insights and practical guidance for policymakers, educators, and stakeholders as they work towards implementing these

educational reforms in Cambodia. This comprehensive approach ensures that the recommendations are well-founded and tailored to the unique context of Cambodia's education system.

4. RESULTS AND DISCUSSION

4.1 Survey Data

The survey data were collected from 565 respondents, including students, teachers, school administrators, parents, and policymakers from five private and five public schools in Cambodia. The key findings from the survey data are summarized below, with detailed tables and graphs illustrating the results in Table 1.

The research revealed widespread support for the transition to full-time education among various stakeholder groups. In private schools, support was particularly strong among parents and teachers, with 85% of parents and 90% of teachers expressing approval. While support was somewhat lower in public schools, most stakeholders, including 80% of parents and 75% of teachers, favored the transition. This strong backing underscores the perceived benefits of full-time education in providing a more structured and consistent learning environment.

Table 1. Perceptions of Full-Time Education by Stakeholder Group

Stakeholder Group	Private Schools (Support %)	Public Schools (Support %)
Students	91%	79%
Teachers	85%	75%
Parents	90%	80%
Administrators	95%	65%
Policymakers	85%	70%

The survey data in Table 1 indicate a high level of support for full-time education across all stakeholder groups, with private schools showing particularly strong support. Students, teachers, and parents in private schools are more familiar with and have positive experiences of full-time education, leading to higher support percentages. In contrast, while showing significant support, public schools reflect lower percentages, particularly among administrators and policymakers, suggesting the need for more advocacy and engagement to achieve widespread acceptance.

Table 2. Technology Integration

Metric	Private Schools (Support %)	Public Schools (Support %)
Use of Advanced Technology	90%	40%
Student Engagement Increase	85%	60%

Regarding technology integration, private schools demonstrated significantly higher levels of technology use than public schools. Specifically, 90% of private schools reported using advanced technological tools such as interactive whiteboards and educational software, compared to only 40% of public schools. This disparity highlights the urgent need to invest in public schools' technological infrastructure.

Table 2 illustrates the disparity in technology integration between private and public schools. Private schools report a significantly higher use of advanced technological tools, such as interactive whiteboards and educational software, with 90% utilization compared to only 40% in public schools. This higher technology use correlates with increased student engagement in private schools (85%) compared to public schools (60%). These findings highlight the urgent need to invest in public schools' technological infrastructure to enhance student engagement and learning outcomes.

Table 3. Multilingual Education

Metric	Private Schools (Support %)	Public Schools (Support %)
English Classes Offered	80%	55%
Chinese Classes Offered	30%	10%
High Proficiency in Languages	70%	35%

Regarding multilingual education, Table 3 shows the differences in multilingual education offerings between private and public schools. Private schools are more likely to offer comprehensive English and Chinese language programs, with 80% offering English and 30% offering Chinese classes. Public schools lag significantly, with only 55% offering English and 10% offering Chinese classes. Consequently, students in private schools exhibit higher language proficiency levels (70%) than their public school counterparts (35%). This disparity underscores the need to expand and enhance language education programs in public schools to better prepare students for global opportunities.

The survey data highlights several key points. There is widespread support for the transition to full-time education, particularly among parents and teachers in private schools, though public school administrators and policymakers show less enthusiasm. Technology integration is significantly higher in private schools, leading to greater student engagement, and there is a clear need for investment in public school technology infrastructure. Private schools are more likely to offer comprehensive multilingual education programs, resulting in higher language proficiency among their students. These findings emphasize the importance of targeted interventions to improve public schools' technological resources and language education.

4.2 Interview Data

In-depth interviews with 50 key stakeholders provided qualitative insights into the challenges and successes of educational reforms. The key themes identified from the interviews are summarized below.

Table 4. Key Themes from Interviews

Theme	Public Schools	Private Schools
Infrastructure Challenges	Lack of adequate classrooms	Well-equipped facilities
Funding Issues	Insufficient funding	Adequate financial support
Teacher Training Needs	Need for more training	Ongoing professional development
Parental Involvement	Limited engagement	High levels of engagement
Multilingual Programs	Basic offerings	Comprehensive programs

Table 4 highlights the qualitative differences between private and public schools. Private schools benefit from well-equipped facilities, adequate funding, ongoing professional development for teachers, high levels of parental involvement, and comprehensive multilingual programs. In contrast, public schools face significant challenges, including inadequate infrastructure, insufficient funding, a need for more teacher training, limited parental engagement, and primary multilingual offerings. These themes reflect the areas where public schools need targeted improvements and investments.

For instance, one administrator from a private school stated, "Our ability to continuously invest in infrastructure and professional development has significantly improved our teaching quality and student engagement." In contrast, a public school teacher mentioned, "We struggle with outdated resources and insufficient training, which hampers our ability to implement new educational strategies effectively."

4.3 Comparative Analysis Results

The study used quantitative and qualitative data analysis techniques to understand the research findings comprehensively.

a. Quantitative Analysis

The quantitative analysis revealed that private school students have higher exam pass rates and GPAs than their public school counterparts. Private schools also have more resources, such as computers, smartboards, and internet access, contributing to higher performance. These results highlight the need for substantial investment in public school infrastructure to bridge the performance gap. (see detail in Figure 1)

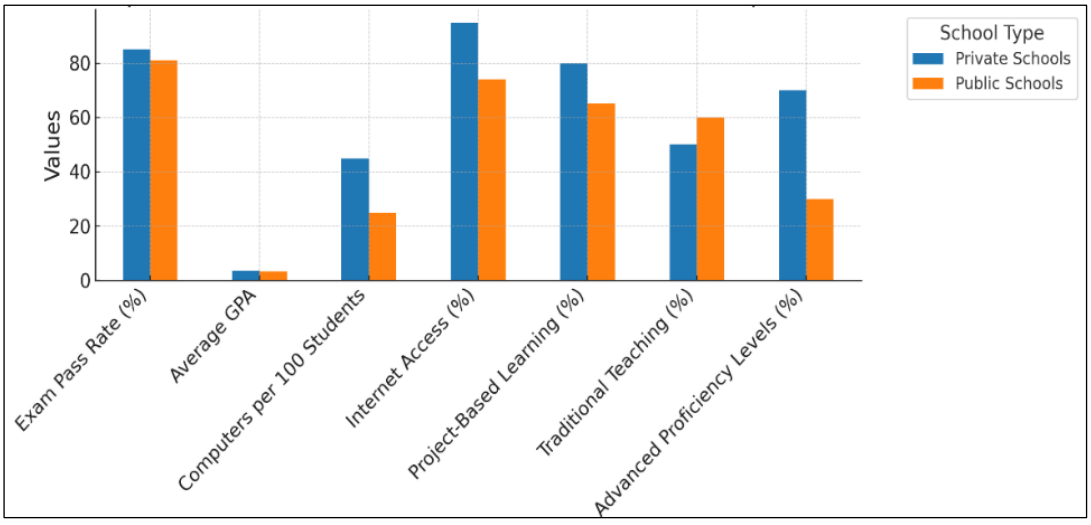

Figure 1. Comparison of Private and Public Schools Across Multiple Metrics

Table 5. Academic Performance

Metric	Private Schools	Public Schools
Exam Pass Rate (%)	85	81
Average GPA	3.5	3.3

Table 5 indicates that students in private schools have higher academic performance, with an 85% exam pass rate and an average GPA of 3.5, compared to an 81% exam pass rate and an average GPA of 3.3 in public schools. These findings suggest that better resources and educational practices in private schools contribute to higher student achievement.

Table 6. Resource Availability

Resource	Private Schools	Public Schools
Computers per 100 Students	45	23
Smart Phone	High	Low
Internet Access	91%	74%

Afterward, Table 6 highlights the disparity in resource availability between private and public schools. Private schools have significantly more resources, with 45 computers per 100 students, compared to 23 in public schools. Additionally, private schools report a high availability of 91% internet access, while public schools have a low availability of smartboards and 74% internet access. This resource gap significantly impacts the quality of education and student outcomes in public schools.

Table 7. Teaching Methodologies

Methodology	Private Schools	Public Schools
Project-based learning (%)	80	65
Traditional Teaching (%)	50	60

Table 7 shows that private schools are more likely to employ innovative teaching methodologies, such as project-based learning (80%), than public schools (65%). Conversely, traditional teaching methods are more prevalent in public schools (60%) than in private schools (50%). These differences in teaching approaches may contribute to the higher academic performance observed in private schools.

Table 8. Language Education

Metric	Private Schools	Public Schools
Advanced Proficiency Levels	70%	30%
Language Offerings	Comprehensive	Basic

Table 8 illustrates the disparity in language education between private and public schools. Private schools report higher advanced language proficiency levels (70%) than public schools (30%), reflecting their more comprehensive language offerings. This finding underscores the importance of enhancing language education programs in public schools to improve student proficiency and global competitiveness.

4.4 Interpretation

The survey and interview data collectively highlight several critical areas needing attention. Private schools show significantly higher support for full-time education, advanced technology use, and comprehensive multilingual programs. Public schools face

substantial challenges, including inadequate infrastructure, insufficient funding, and a need for enhanced teacher training. These findings underscore the need for targeted investments and strategic reforms in public schools to improve educational outcomes.

For instance, the higher exam pass rates and GPAs in private schools can be attributed to their better resource availability and innovative teaching methodologies. The substantial disparity in technology integration and language education proficiency between private and public schools further emphasizes the importance of addressing these gaps to ensure equitable educational opportunities for all students in Cambodia.

5. FORMULATING RECOMMENDATIONS

Based on the findings from the data analysis, the following actionable recommendations have been formulated to support the transition of Cambodian public schools to a full-time education model that integrates technology and multilingual education.

First, substantial investment is needed to build and upgrade classrooms and provide necessary technological resources in public schools. This includes increasing the number of computers and smartboards and ensuring internet access in all public schools. Securing funding from government and private sector partnerships is essential to support new educational programs and technology acquisition. This can be achieved through grants, donations, and public-private partnerships. The technological determinism theory underscores technology's importance in shaping educational outcomes. Public schools can enhance their educational delivery by investing in technology, making it more engaging and effective.

Second, implementing comprehensive professional development programs is crucial to equip teachers with the skills needed for full-time education and technology integration. Ongoing training in innovative teaching methodologies and the use of technology in the classroom will help improve teaching effectiveness and student engagement. This also involves developing training programs that address the specific needs of teachers in public schools, providing them with the tools and support necessary to adapt to new teaching models and technologies. The theory of andragogy emphasizes the importance of adult learning principles in teacher training, suggesting that professional development should be continuous, practical, and relevant to the teachers' daily experiences.

Encouraging greater parental involvement in education is also essential to support student success. This can be done through regular parent-teacher meetings, workshops, and community engagement initiatives. By fostering a collaborative relationship between parents and schools, students will receive more comprehensive support at home and in the classroom. The ecological systems theory posits that students' development is influenced by their interactions with their immediate environments, including family and school. Enhanced parental involvement can lead to better academic and social outcomes for students.

Finally, adapting successful teaching methodologies and multilingual programs from private schools to public schools is essential. Implementing project-based learning

and expanding language education offerings to include comprehensive English and Chinese programs will help enhance educational outcomes and better prepare students for the demands of the modern world. This involves incorporating these languages into the curriculum and employing effective teaching strategies that promote language proficiency and cultural understanding. Constructivist theory suggests that learners construct knowledge through experiences and reflections, making project-based learning a practical approach to fostering deep understanding and critical thinking skills.

6. KEY FINDINGS SUMMARIZE

This study uncovered several key findings about the potential benefits and challenges of transitioning Cambodian public schools to a full-time education model that integrates technology and multilingual education. The findings are based on a comprehensive analysis of survey data, interviews, literature review, and comparative analysis between private and public schools in Cambodia.

a. **Support for Full-Time Education:** The research revealed widespread support for transitioning to full-time education among various stakeholder groups (parents and teachers in public and private schools).
b. **Technology Integration:** The technological disparity highlights the need for substantial investment in technological infrastructure in public schools, as private school students reported higher levels of engagement and improved learning outcomes due to the use of advanced technology.
c. **Multilingual Education:** Students in private schools demonstrate higher proficiency levels in these languages, with 70% achieving advanced proficiency compared to 30% in public schools. This finding emphasizes expanding and enhancing language education in public schools to better prepare students for global opportunities.
d. **Infrastructure and Resource Availability:** Many public schools lack adequate classrooms, technological resources, and essential educational materials, which affect teaching methodology. These resource limitations hinder the ability of public schools to provide a high-quality education and underscore the urgent need for infrastructure improvements and resource allocation.
e. **Teacher Training and Professional Development:** The study found that teacher training and professional development are critical areas needing attention in public schools. Enhancing teacher training and providing continuous professional development are essential for improving teaching quality and educational outcomes in public schools.
f. **Parental Involvement:** Encouraging greater parental involvement in public schools through regular parent-teacher meetings, workshops, and community engagement initiatives is crucial for fostering a supportive learning environment.

7. LIMITATION AND FUTURE RESEARCH

While this study provides valuable insights, it is limited by its focus on a relatively small number of private schools, which may not represent Cambodia's full spectrum of private education. Future research could explore a broader sample of schools and examine

the long-term outcomes of educational reforms. Additionally, investigating the impact of these reforms on rural and underprivileged areas would provide a more comprehensive understanding of educational equity in Cambodia.

8. CONCLUSION

This study comprehensively analyzes the transition to a full-time education model in Cambodian public schools, integrating technology and multilingual education. The research highlights significant disparities in technology integration, language education, and overall resource availability between the two sectors by comparing practices and outcomes in five private and five public schools. While private schools demonstrate advanced technology use, high proficiency in English and Chinese, and superior infrastructure, public schools face challenges in these areas, which affect student engagement and academic performance.

The findings underscore the importance of investing in public school infrastructure, particularly technology and multilingual education. Substantial government and private sector funding is needed to bridge the gap and upgrade classrooms and digital resources. Additionally, comprehensive professional development programs for teachers should be implemented to ensure the effective use of technology and innovative teaching methodologies. Encouraging parental involvement and adopting successful private school practices like project-based learning and multilingual education will further strengthen the public school system.

The significance of this study lies in its actionable recommendations for policymakers and educators. While the challenges of resource limitations and teacher training are considerable, they can be addressed through strategic partnerships, government initiatives, and continuous monitoring of the reforms. By tackling these issues, Cambodia can achieve its goal of improving the quality of public education and preparing students for the demands of a globalized world.

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