



Strategies to Lower Private Education Costs and Fund Digital Advancements in Public Schools

Social Budget Analysis Division, Budget Analysis Department Analyst Sung-eun Kim

Heightened Dependence on Private Tutoring in Korea's Primary and Secondary Education

▪ While Korean public education is universally accessible, it hasn't fully met parents' and students' expectations for high-quality education, leading to substantial spending on private tutoring.

- Korea's per-student public education spending in primary and secondary schools was USD 15,148 in 2020, the 6th highest among 38 OECD countries, and 33.4% above the OECD average of USD 11,352.

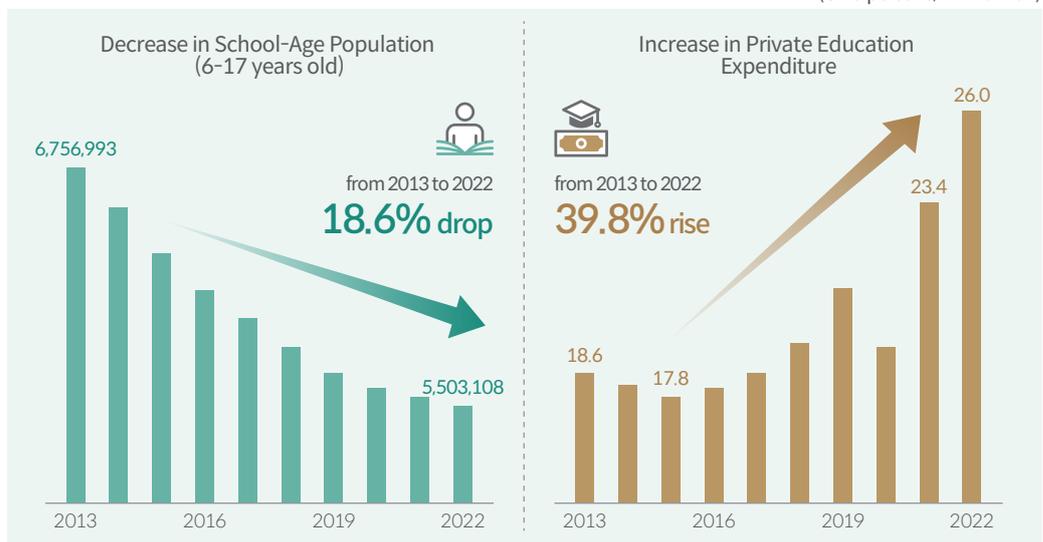
• Despite scoring above the OECD average in reading, math, and science according to PISA (Program for International Student Assessment), Korea has seen a decrease in these scores.

※ Reading: from 556 (2006) to 514 (2018), Math: from 554 (2012) to 526 (2018), Science: from 538 (2012) to 519 (2018)

- Over the past decade (2013-2022), the school-age population decreased by 18.6%, yet spending on private education for primary and secondary students rose by 39.8%. In 2022, the expenditure reached KRW 26 trillion, marking an 11.1% increase from the previous year.

[Figure 1] School-Age Population and Primary & Secondary Private Education Spending Trends

(Unit: persons, KRW trillion)

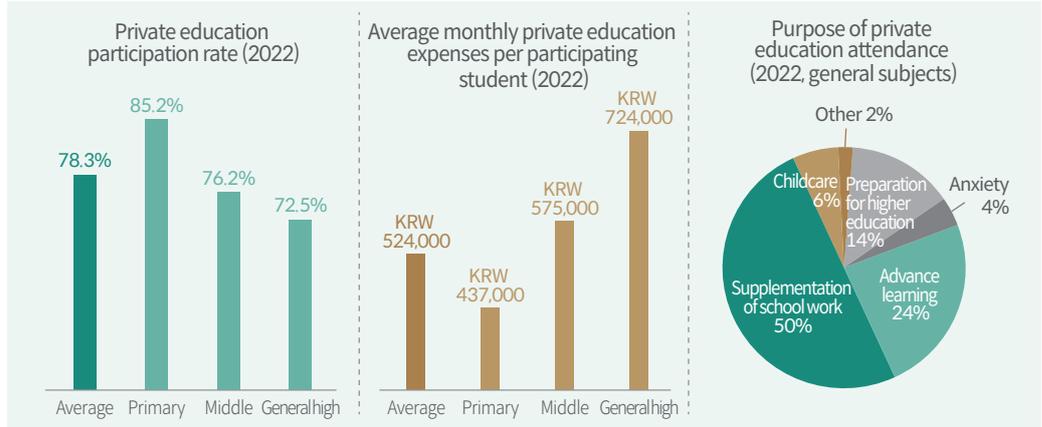


Source: Statistics Korea

- In 2022, the average participation rate in private education was 78.3%, with monthly expenses averaging KRW 524,000 per student. For students in general high schools, this figure was higher, at KRW 724,000 per month.

• The primary reasons for private education enrollment were: 50% for supplemental school courses, 24% for advanced study, and 14% for preparation for higher education.

[Figure 2] 2022 Data on Private Education: Participation Rates, Average Monthly Costs, and Reasons for Enrollment



Source: Statistics Korea

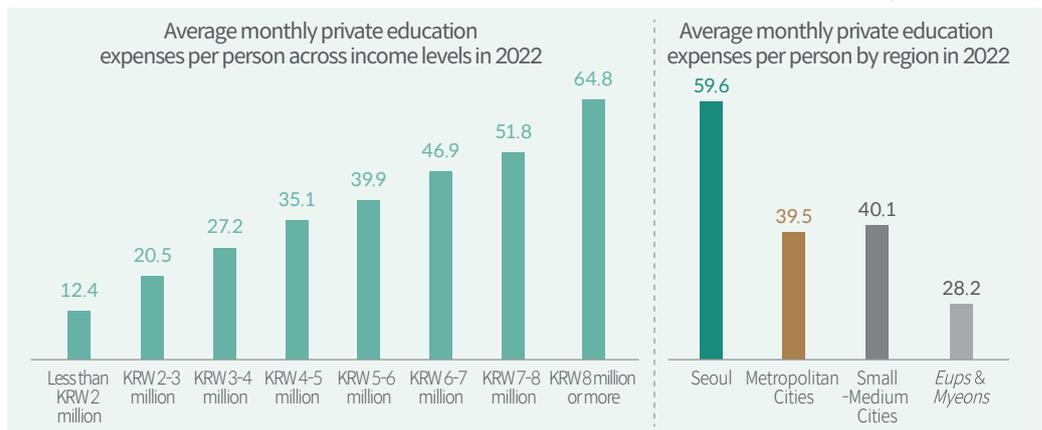
Inequalities in Private Education Based on Income and Location

▪ As dependence on private education in primary and secondary levels increases, notable differences are seen across various income groups and regions, potentially widening educational disparities.

- Private education spending per individual rises with household income. In 2022, the average monthly expense for private education per person in high-income households (earning over KRW 8 million monthly) was approximately 5.2 times that of low-income households (earning below KRW 2 million).
- Larger cities tend to have higher average private education expenses per person, with Seoul's average monthly expenses being about 2.1 times greater than those in smaller towns, such as *eups* and *myeons*.

[Figure 3] 2022 Comparison of Average Monthly Private Education Expenses Per Person by Income Level and Region

(Unit: KRW 10,000)



Source: Statistics Korea

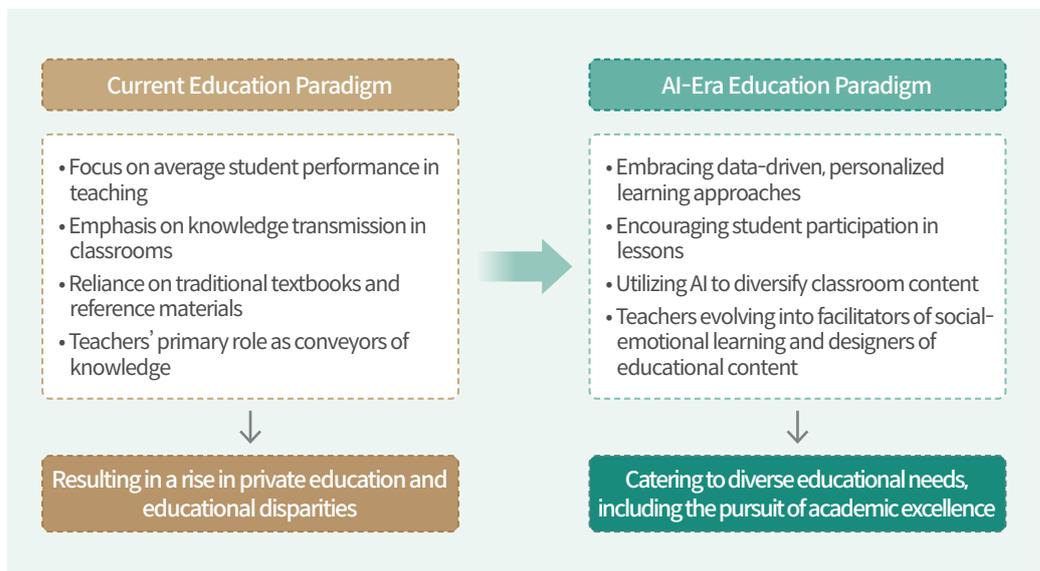
Urgency for Digital Transformation in Primary and Secondary Education

▪ The traditional public education model, geared towards the average student, has contributed to the growth of private tutoring and increased educational inequalities.

- Classroom instruction, often aimed at the median academic level, does not sufficiently cater to students seeking higher academic achievement. This gap in educational needs leads many students to seek private educational institutions like *hagwons*, where they not only supplement school courses but also pursue advanced studies.

- **The advent of interactive AI technologies promises a transformation in education, catering to a variety of learning needs, including the pursuit of excellence currently underserved in public education.**
 - Recent advancements in generative and interactive AI (like Chat GPT) highlight the need to evolve from traditional education models to more student-centered, self-directed, and creative learning methods, leveraging AI and big data.
 - In this new AI-driven educational landscape, personalized, data-driven education will become feasible, allowing students to be more engaged. The role of teachers is expected to shift towards being facilitators of social-emotional learning and designers of various AI-integrated educational content.
- **It's vital for public education to spearhead the shift towards an AI-driven education paradigm and enhance its quality to incorporate aspects traditionally sought in private education.**

[Figure 4] Shift in Educational Paradigms with AI Integration



Strategy for Digitally Transforming Primary and Secondary Public Education

- **The effectiveness of AI-driven innovation in public education largely hinges on the digital proficiency of teachers in primary and secondary schools. Therefore, it's crucial to support teachers in developing AI-based teaching skills, enabling them to facilitate personalized learning, foster creativity, and conduct interactive lessons.**
 - All teachers should have access to training that builds foundational skills in AI and digital resource utilization, along with practical classroom application abilities.
- **To ensure the effective implementation of AI-based digital education, there is a need to focus on cultivating a group of teachers who can serve as digital transformation leaders within their schools.**
 - Aim to develop at least one leading teacher in each primary, middle, and high school
 - Provide opportunities for teachers to guide small study groups and engage in international school visits as part of their training. Such experiences are designed to instill a sense of pride and foster a collaborative spirit among them, as they lead the way in innovative public education

Strategy for Funding Digital Changes in Public Education

- **Implementing AI-based educational approaches in after-school programs is crucial for addressing educational inequalities among students from underprivileged regions and low-income families, and for fulfilling the needs currently met by private education.**
 - Expand the use of AI and big data in after-school activities to enhance both academic learning and career development
 - Support programs that enrich the curriculum, including STEM (science, technology, engineering, and math), as well as arts and sports programs
 - Integrate the current approach to managing after-school programs with a new system where top-tier institutions (such as universities, companies, and organizations) are selected and entrusted to run these programs to improve the quality and availability of after-school activities, thereby reducing dependence on private education

- **To address regional educational disparities and reform public education nationally, securing funding through special subsidies is essential.**
 - A feasible approach would be for the Ministry of Education to earmark these funds and allocate them to metropolitan and provincial education offices. This method would allow for the development and implementation of a uniform national framework for elementary and secondary teacher training, thereby reducing regional differences in after-school educational offerings.
 - Currently, the special subsidy, amounting to 3% of local education subsidy resources under the Local Education Subsidy Act, totals KRW 2.2 trillion for 2023. This fund is divided into categories such as state policy initiatives (KRW 1.3 trillion), local projects (KRW 0.7 trillion), and disaster safety management (KRW 0.2 trillion).

- **Representative Kim Jin-pyo introduced a bill to the National Assembly on August 31, 2023, proposing amendments to the Local Education Subsidy Act to fund digital reforms in public education, which is now being reviewed by a competent committee.**
 - The proposal suggests increasing the special subsidy rate from the current 3% to 4% for six years (2024–2029), generating an additional KRW 742.4 billion (based on the 2023 budget).
 - These funds would be dedicated to enhancing AI-related teaching skills for primary and secondary school teachers and developing AI-tailored after-school programs.
 - The plan includes reverting to the original subsidy rate in 2030, without requiring further legislative adjustments.
 - Passage of this bill in the current legislative session is deemed crucial for alleviating the financial strain of private education and positioning public education at the forefront of the education paradigm shift in the AI era.