

THE UNIVERSALIZATION OF EDUCATION IN TÜRKİYE AND NEW ORIENTATIONS

MAHMUT ÖZER



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WRITTEN BY
MAHMUT ÖZER

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...to President Recep Tayyip Erdoğan,
leader of the universalization of education in Türkiye.

“When it comes to our great nation, Türkiye resembles a thick blackberry bush with buds sprouting from each of its branches. You will notice that while one bud is blossoming, the other is withering, and another is bearing fruit. Do not simply focus on a single bud; instead, consider the bush holistically. Always remember that Türkiye has its own unique identity, incomprehensible to the simple mind, indecipherable to the compass and ruler. It will not sink. If it does sink, the oceans will flood.”

Alev Alatlı

“Aziz ülkemize gelince, ille de bir şeye benzetecekseniz, her budağından sürgün atan salkım saçak bir böğürtlen çalısına benzeteceksiniz Türkiye’yi. Bir sürgünü çiçeğe dururken, diğerinin kurumakta, ötekisinin meyve vermekte olduğunu görün. Tek bir sürgüne takılıp kalmayın, bütüne bakmayı âdet edinin. Unutmayın ki, düz akılla anlaşılmaz, pergele, cetvele gelmez, kendisine has bir kimliği vardır Türkiye’nin. Batmaz. Batarsa, okyanuslar taşar”.

Alev Alatlı

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Foreword

The Universalization of Education in Türkiye and New Orientations offers timely scrutiny of one of the impressive achievements of the last twenty years in the education, which paved the way to a transformation of education and enhanced Türkiye's performance considerably.

The success of any policy are closely interwoven with economic, social, political, and cultural conditions. In the case of Türkiye, effective educational policies do not only reflect the growth in many fields but also act as an engine for the country's development and innovation strategy.

This book by the Minister of National Education, Prof. Mahmut Özer, dives into this successful journey, led by President Recep Tayyip Erdoğan, exploring its phases, elements, and impact. The efforts adopted a three-fold approach: to enhance the quality of education services, distribute these services all around the country, and ensure that all people can benefit equally from these expanded services.

Such an approach was essential to tackle deep-seated problems that affected Türkiye's education system for decades. Comparatively low performance in international assessments, low schooling rates, and low enrolment of female students in some regions represented long-standing obstacles to providing quality education to all.

These issues are of policy significance to the higher education system nationwide. Therefore, the successive governments led by President Recep Tayyip Erdoğan committed sustained efforts and substantial resources to make education as effective and efficient as possible, not only because of labor market considerations but also because this sector is strategic as it is the incubator for the human capital necessary to carry forward social and economic development.

The Universalization of Education in Türkiye and New Orientations is an invaluable resource to follow how this successful strategy bore fruit over the last 20 years, which took Türkiye to praiseworthy international rankings. The book masterly underlines the impact of the Ministry of National Education on national issues as the dramatic boost to equality of opportunity but also considers the significant impact on teachers and students in terms of budget and status.

Armed with vital and accurate statistics, Prof. Özer effectively navigates the different indicators. Using a comparative approach, these indicators are put in context to see how the Turkish educational system adapted and thrived under the ever-shifting demands of our globalized world, exemplifying a success story for learning and equity in the twenty-first century.

This book will no doubt be a valuable reference to those who wish to have an insight into the development of Turkish National Education and also to policymakers to gain awareness of what needs to be accomplished for a more inclusive, diverse and adaptive education of students.

Editorial Team
TRT World Research Centre

Preface

The universalization of education, which began at the dawn of the 19th century, expanded to include higher education after World War II. The USA and western European countries have pioneered large-scale projects to increase societal education levels by facilitating access to schooling for their citizens. These nations have defined education as a fundamental right for every child; thus, they set universalization of education as their target. In the second half of the twentieth century, many countries reached their universalization targets set at 100% completion of primary education for citizens and more than 50% at the higher education level. The goal of producing qualified human capital—representing the most important and long-term wealth of countries—is the driving force behind this expansion and universalization. Ensuring universalization of education and, thus, investments in human capital is vital not only for the economic development of countries but also for democracy, social welfare, and peace.

In Türkiye, the target of educational universalization has a distinct historical background. The Ottoman Empire enacted a “compulsory education law” relatively early on, and subsequently, almost every administration of the Turkish Republic prioritized increasing schooling rates. These rates have since multiplied remarkably, particularly at the primary school level. However, Türkiye reported significantly lower schooling rates and other universalization indicators compared to OECD countries in the 2000s. The period of AK Party governments, under the leadership of President Recep Tayyip Erdoğan, has seen solid transformations in education that assisted in the process of becoming competitive with OECD countries. During this time, with significant increases in educational investments, remarkable developments have been achieved in almost all educational indicators. A goal was set at the beginning of the last 20 years to increase enrollment across all levels of education. Thus, educational investments peaked as new schools

and classrooms were built in all provinces to ensure further access to education throughout Türkiye. Alongside these initiatives, an “education campaign” was launched in all provinces.

The Turkish education system is large-scale, with almost 19 million students and 1.2 million teachers. Hence, improving access to education requires grand investments to meet the large-scale system. Thus, educational investments peaked in this period to increase the number of schools and classrooms. As a result, we have observed an impressive benefit from these investments in a relatively short period. Schooling rates have increased significantly at all levels of education in Türkiye, from preschool to university. For example, the schooling rate in secondary education, which was around 44% in 2000, has reached 95% today. The 4+4+4 regulation implemented in 2012 played an essential role in this success, as it increased compulsory education from 8 to 12 years. Similarly, significant improvements were achieved in higher education enrollments, with the rate of students between 18 and 22 expanding from 14% in 2002 to 45% in 2021.

When schooling rates amplified, the targets were revised to continue building quality-focused improvements. As the number of students increased with universalization, new teachers were recruited, and new schools were established. Thus, a major investment was made to improve the teacher-to-student ratio and keep class sizes low. Today, both goals are nearly achieved: the educational system has approximately 850,000 classrooms, 56% of which have below 25 students. Additionally, the number of teachers increased from 500,000 in the 2000s to 1,200,000 in 2020. Thanks to these investments in teacher recruitment, Türkiye has also approached the OECD averages in both aspects.

Today’s levels of educational quality would not have been possible without the grand educational investments in the 2000s. These improvements have formed the basis for universalizing education.

However, some educational access issues continue to persist. It is vital for Türkiye to continue to both increase educational quality and close the gaps in access to schooling.

It is worth noting that Türkiye has adopted evidence-based measures to increase both universalization and educational quality. Highly respected educational performance indicators affirm these concurrent improvements. The recent findings of large-scale international assessments, such as the PISA and TIMSS, reflect a steady and consistent increase in both student performance and universalization.

Nonetheless, it is also essential to ask: why did the universalization of education delay in Türkiye? While most developed countries completed their universalization in the 1950s and now focus on educational quality, we only began universalization in the 2000s, representing a delay of at least 50 years. Elitist national perspectives towards education played a major role in this delay, causing universalization to be obstructed in an attempt to maintain educational “quality.” This perspective ignores the fact that educational quality needs a process to develop. Today’s highly qualified educational institutions started with humble beginnings before improving over time and becoming systematized. Therefore, supporting every humble beginning with a quality-oriented and continuous improvement culture is important. Consequently, universalization and, thus, bolstering access to education does not detract from the educational quality.

The Turkish education system improved significantly in the last 20 years. It should be highlighted that disadvantaged groups have benefited most from the improvements designed to universalize education. The “coefficient regulation” created barriers to university enrollment for certain groups of students. For example, the elimination of the “headscarf ban” has contributed to the increase of inclusiveness in higher education. Additionally, elective religious

education courses have been added to education programs. Thus, through these attempts, we witness that this period has been critical for ensuring equality of opportunity in education, democratization and inclusivity.

Now, the focus needs to be on the constant improvement of educational quality from preschool to higher education through a systematic approach, in which Türkiye has the power and potential to achieve this goal.

In this book, my general aim is to evaluate the developments and improvements in our education system over the last 20 years. To achieve this, I will firstly introduce improvements objectively and discuss their outcomes based on data. Our citizenry does not understand these improvements adequately and therefore, cannot appreciate their impact. Secondly, I aim to contribute to new education policies to alleviate the achievement gaps between schools, thus increasing educational equality.

This book is the revised and extended version of my earlier book titled (The Universalization of Education in Türkiye [Türkiye’de Eğitimin Evreselleşmesi], 2022). In this version, the statistics were updated with recent developments, and new projects along with the improvements were included. Now it reflects a more comprehensive picture of the recent improvements and projects in the Turkish education system. As in the previous book, I believe this version gives a great insight into how the Turkish education system has evolved in the last 20 years.

I would like to thank Dr. Hayri Eren Suna for his support and contribution to this book. My ultimate goal is for children and young people across the country to attend a school in their neighborhood and receive a high-quality education. I hope this book will contribute to the achievement of this purpose.

INTRODUCTION

Education is the most important catalyst for increasing the welfare of societies and developing individuals' skills to compete on a global scale in the 21st century (Krstic et al., 2020; World Economic Forum, 2014). After the industrial revolution, the main goal of countries has been simultaneously supporting social and economic development. Education has great potential to become the most effective tool to achieve these goals (Mathis, 2011; Sahlberg, 2006). Studies have clearly evidenced the relationships between education and social and economic development; thus, countries seek to revise their education policies and increase investments in education (Sahlberg, 2006; Schweke, 2004).

A qualified social capital with adequate knowledge and skills built through education plays a leading role in the long-term economic development of countries (Özer & Perc, 2020; Terziev, 2017). Studies show that educational investments provide improvements at both individual and societal levels (Liao et al., 2019; Schultz, 1987; Terziev, 2017). Therefore, education investment to raise qualified human resources is an investment with the highest economic return (Zoran, 2015). As the quality of education increases, the employability of individuals, wages in the labor market, and contributions to the economy all rise (Afşar, 2009; Connolly & Gottschalk, 2006; Riddell & Song, 2011).

Countries make great efforts to improve the inclusiveness and effectiveness of their education systems. Educational movements focused on equal opportunities seek to ensure that all segments of society benefit from schooling in the same way and can access educational services regardless of their background (Betts &

Roemer, 2005). Steps to ensure that all people have access to educational services increase the equality of opportunity in education. Therefore, most countries have implemented projects and reforms to close access gaps, thereby increasing educational quality (OECD, 2012).

Moreover, technological developments impacting daily life also changed the traditional role of education in the 2000s. During this time, discussions on the quality and equality of opportunity in education intensified (Lynch, 2011; Smith & Lynch, 2010). As technology affected life more intensely, the importance of qualified human resources increased, and the demands of the labor market also changed remarkably. The extensive use of automation and AI in production has increased the importance of raising social capital with high-level skills, such as critical thinking and problem-solving (ILO, 2021; TTKB, 2005). Efforts to develop social and emotional skills alongside these cognitive skills have increased (MoNE, 2021; OECD, 2021). Educational policymakers must consider these changes and revise national education systems to include all students and ensure equal opportunity.

In the 1990s, the quality of the Turkish educational system was hotly debated, leading to vocal demands for change (Çelik, 2011). At that time, the system had significant issues: low schooling rates, regional and gendered gaps in access to education, and disparities in academic achievement across school types and regions (Çelik, 2011; Gür & Çelik, 2009). The curriculum was also highly criticized for its insufficient and information-based content, along with its lack of focus on 21st-century delivery.

The 1990s was an important period for the Turkish education system since many aspects of the system were considered inadequate. Significant projects were undertaken to mitigate educational access and performance issues by making holistic improvements to the Turkish education system (Çelik, 2011). First, the Primary Education Project I (TEP I) aimed to increase access to preschool education and boost primary school enrollment rates to 100% by prioritizing females and socioeconomically disadvantaged students. Second, the “Improving Education in the 2000s” Project (ECYP) aimed to increase schooling rates by improving both the number of schools and school infrastructure. Therefore, the projects in this period focused on maximizing schooling rates, promoting gender equality, and supporting disadvantaged students. Despite detailed planning, the improvements of these projects were limited at the regional level. Schooling rates decreased throughout Türkiye between 2001 and 2004, due to the effects of the 2001 economic crisis and the incompatibility of the aforementioned projects with the social realities in Türkiye at the time (Çelik, 2011).

The 2000s saw significant transformations in education across Türkiye. AK Party has taken necessary steps to increase access and quality in education and thereby democratize the education system, thus becoming a “reform actor” in education since 2002 (Çelik & Gür, 2013, p. 151). During this period, the Ministry of National Education (MoNE) increased its budget to improve access and quality in education through comprehensive collaborations with national and global stakeholders. Among these collaborations were the “European Union Primary Education Program,” World Bank “Primary Education Project I and II,” and “Girls, Let’s Go to School” campaign supported by UNICEF (Çelik, 2011; Gümüş & Gümüş, 2013). The “Secondary

Education Project” between 2006 and 2011, with the support of the World Bank and the “Reconstruction of Secondary Education Project” in 2006, significantly contributed to improving the physical infrastructure of secondary schools in Türkiye. The curricula and education programs were also revised during this process according to a constructivist approach. Various international reports have cited the 2000s as the years of multidimensional transformations in Turkish education. For example, the 2013 World Bank report “Promoting Excellence in Schools in Türkiye” praised the changes as follows (World Bank, 2013, p. V):

“The education system in Türkiye has shown remarkable improvements with an increase in student performance and reduced inequality, as well as a steady increase in enrollment rates since 2003”.

Those who benefited the most from the universalization of education were the socioeconomically disadvantaged students. In this context, the Conditional Cash System (CCS) provides financial support to socioeconomically disadvantaged families based on their children’s regular school attendance (Özer et al., 2020). Since its establishment in 2007, the CCS has facilitated positive outcomes for maximizing the enrollment and schooling rates of disadvantaged students (Özer et al., 2020).

Since 2018, more than 300,000 students have participated annually in the Remedial Education in Primary Schools Program (IYEP), implemented to compensate for the learning gaps in the Turkish language and mathematics in primary schools. The “1,000 Schools in Vocational Education and Training (VET)

Project” launched in 2019 identified 1,000 VET high schools with infrastructure deficiencies before improving their physical infrastructure; updating their workshops, laboratories, and libraries; and providing academic and social support to their students, parents, and teachers (Özer, 2021). The MoNE has devoted significant efforts to provide targeted academic and social support to socioeconomically disadvantaged students through large-scale projects (some of which are briefly mentioned here), thus strengthening equality of opportunity in education.

Large-scale projects aiming to increase educational access and quality have been implemented in Türkiye for many years. Türkiye has a large education system with approximately 19 million students and more than 1 million teachers. The simultaneous implementation of projects for improving education in the 2000s creates challenges for determining the unique contribution of each individual reform initiative. However, it is important to evaluate the targets, steps, and achievements of these reforms over time from a holistic perspective.

The present study reviews the changes in access to education and quality of education in Türkiye over the last 20 years through quantitative and objective educational indicators. This book first evaluates the improvements from the past two decades according to the indicators of access to education, educational investment and performance. Second, a discussion of these results focuses on education access and education investment indicators at the regional level. The last section discusses the social policies in education in detail. These findings will contribute a holistic perspective on the improvement of the education system in Türkiye and the universalization of education.

THE UNIVERSALIZATION OF EDUCATION IN TÜRKİYE

ACCESS TO EDUCATION

This section focuses on access to education at all levels of the Turkish education system, from preschool to higher education.

Access to Preschool Education

Preschool education is an education level that prepares students for school life and provides significant contributions to academic achievement in both the short and long term (Anasız et al., 2018; Cortazar et al., 2019).

Preschool education initially emerged as an employment-related service to provide women and divorced parents with childcare during the workday. However, longitudinal studies originating from the USA (Heckman et al., 2010, 2013) illuminated the lifetime economic and social effects of preschool education, including significant gains in children's cognitive and non-cognitive skills (Van Belle, 2016). Studies on the contributions of preschool education elevated these discussions beyond facilitating the employment of parents. Thus, countries have prioritized preschool education in their policies, given its effects on social development, as well as the reduction of crime rates (Yang, 2021). Moreover, preschool education provides the greatest long-term economic returns as an instrument with the lowest cost compared to later interventions.

Participation in preschool education can strengthen education equality by alleviating the long-term achievement gaps among students (Anasız et al., 2018; Cortazar et al., 2020; Özer et al., 2021). Therefore, increasing access to preschool education also better prepares students for school life and builds stronger academic and social skills. In this context, preschool education is included in the scope of compulsory education in many education systems, or students are strongly encouraged to enrol.

On the other hand, the children of socioeconomically advantaged families are much more likely to attend preschool, which may widen achievement and opportunity gaps for students in their first years of schooling. Research in Türkiye has illustrated higher preschool enrollment rates for children from affluent families (ERG & AÇEV, 2017). For this reason, Türkiye has set targets to increase access to preschool education for all segments of society and encourage the participation of socioeconomically disadvantaged students. Flexible models such as mobile classrooms and teachers, as well as summer schools, were implemented in regions with lower access to preschool education institutions. The end project with UNICEF enabled approximately 25,000 students with various disadvantages to enrol in preschool education (Özer et al., 2020).

The number of students in preschool education and the change in schooling rates (for diverse age groups) is given in Figure 1 and Figure 2, respectively. These figures illustrate the significant increases in the number of students accessing preschool education between 2000 and 2021 and enrollment rates since 2012.

While the number of students accessing preschool education was 227,464 in the 2000–2021 academic year, this number reached 1,885,004 in 2021–2022. In other words, the number of students accessing preschool education in the last 20 years has increased approximately eightfold. As a result of this increase, schooling rates in preschool education also amplified significantly; for example, while schooling in the 5-year-old group was 39.7% in the 2012–2013 academic year, it increased to 83.4% in 2021–2022. Considering the 5+ age rates, which were released for the first time in 2021 and 2022, the schooling of 5 year or older children exceeded 97%.

Figure 1. Number of Students in
Preschool Education between
2000 and 2021

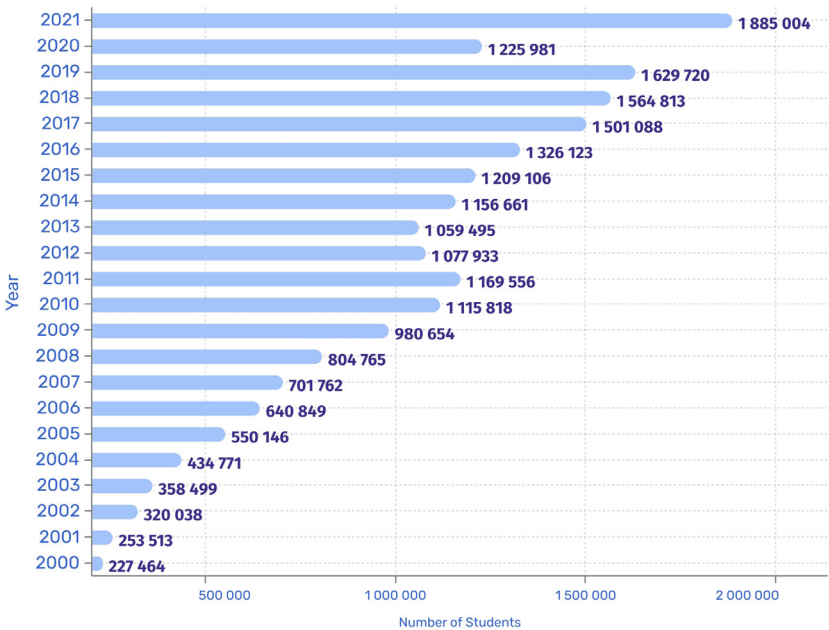


Figure 2a. 5-Year-Old Net Schooling Rates of Preschool Education between 2012 and 2022*

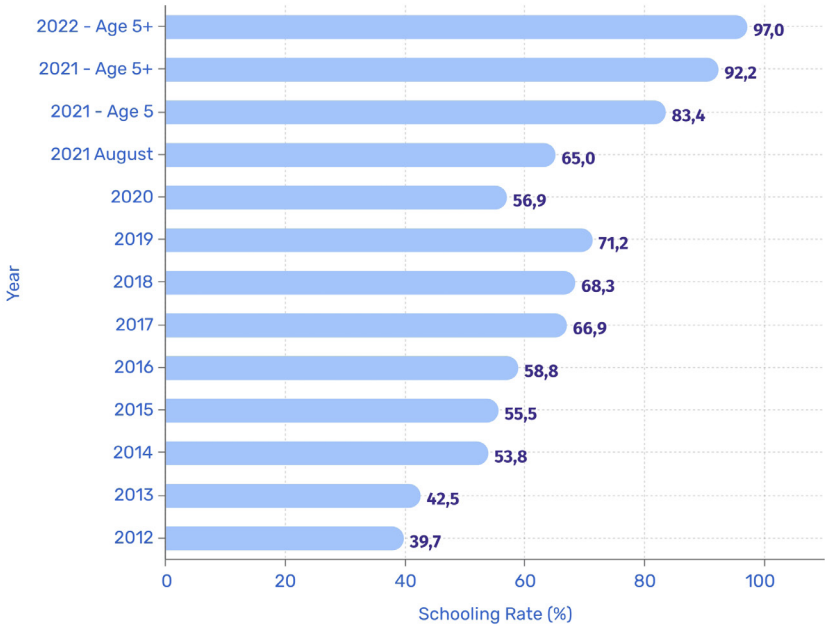


Figure 2b. 3-5 and 4-5 Year-Old Net Schooling Rates of Preschool Education between 2012 and 2022*

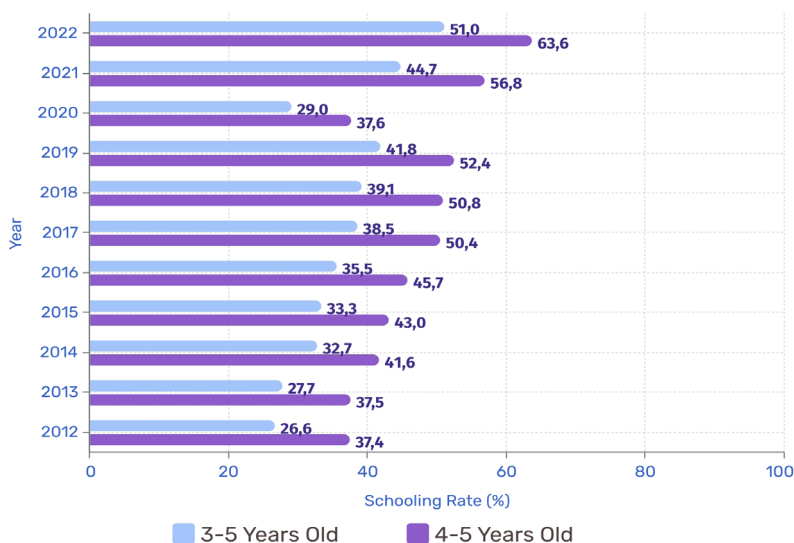
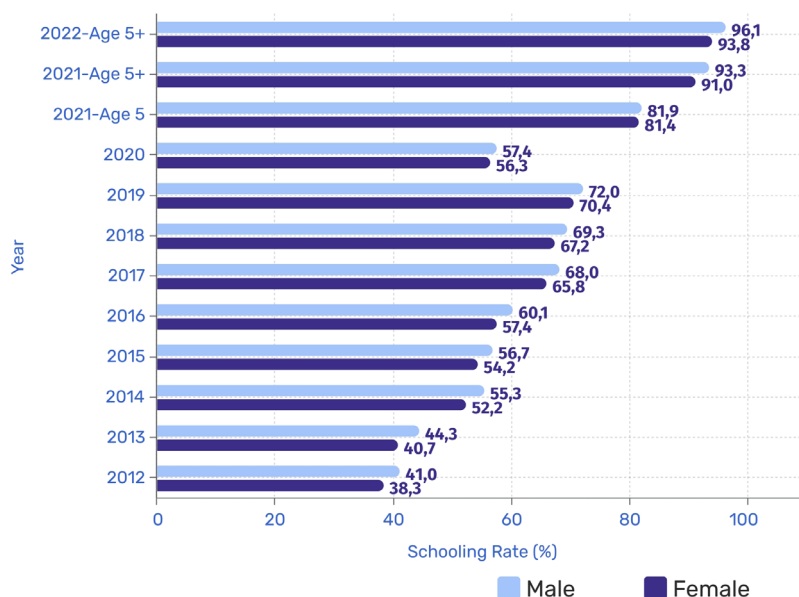


Figure 2b* shows that access to preschool education improved in all age levels, including 3-5 and 4-5 age intervals. As an addition to 5-year and 5-year and older groups, the coverage of preschool education extended from 3-year-olds to 5-year and older students. As seen from Figure 2b, the schooling of 3 to 5-year-olds, which is the most comprehensive indicator of preschool level, increased remarkably from 26.6% to 51% in ten years. A similar pattern was also valid for 4 to 5-year-olds, in which the schooling rates rose from 37.4% to 63.6% in the same period.

Although the increase in schooling rates is a positive indicator, the change in this increase by gender is also significant. Figure 3 indicates the change in preschool schooling rates by gender and years between 2012 and 2022.

*All statistics for 2022 are based on live data of Ministry of National Education (MoNE)

Figure 3a. 5 Years-Old Males' and Females' Schooling Rates in Preschool Education between 2012 and 2022*



As seen in Figure 3a, the schooling rates at the pre-primary level increased remarkably for both girls and boys. In the last ten years, the enrollment rate for 5-year-old female students has increased from 38.3% to 81.4%, and for male students from 41% to 81.9%. The schooling of 5 years old or older children exceeded 90% in both gender groups. In addition, the schooling gap of 2.7% between gender groups in 2012 decreased to 0.5% in 2021.

Figures 3b and 3c also indicate a remarkable schooling improvement in both genders. These figures show that 4-5 age schooling rose from 36% to 63%, and 3-5 age schooling increased from 26% to 50.5%. Lastly, the negative impact of the COVID-19 pandemic on preschool enrollment is evident in 2020 rates.

Figure 3b. 3-5 and 4-5 Year-Old Net Schooling Rates of Preschool Education between 2012 and 2022 by Gender*

a. Females

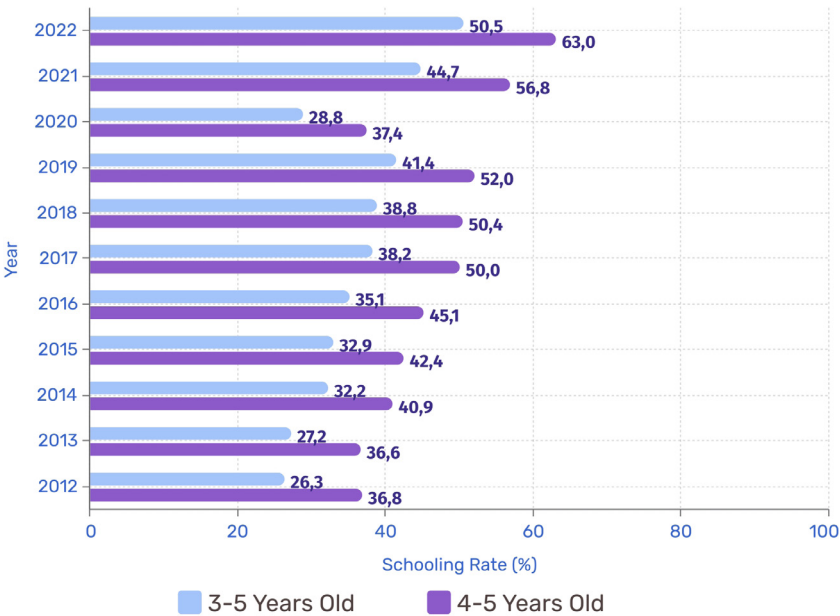
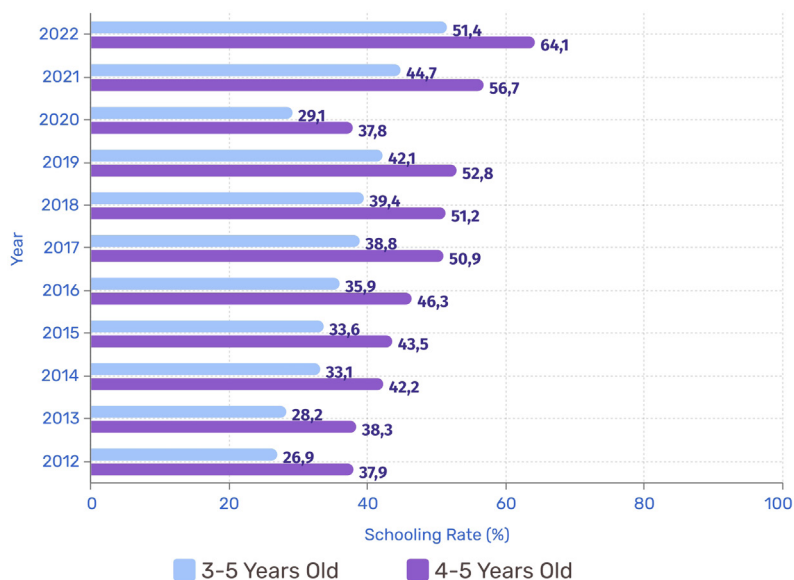


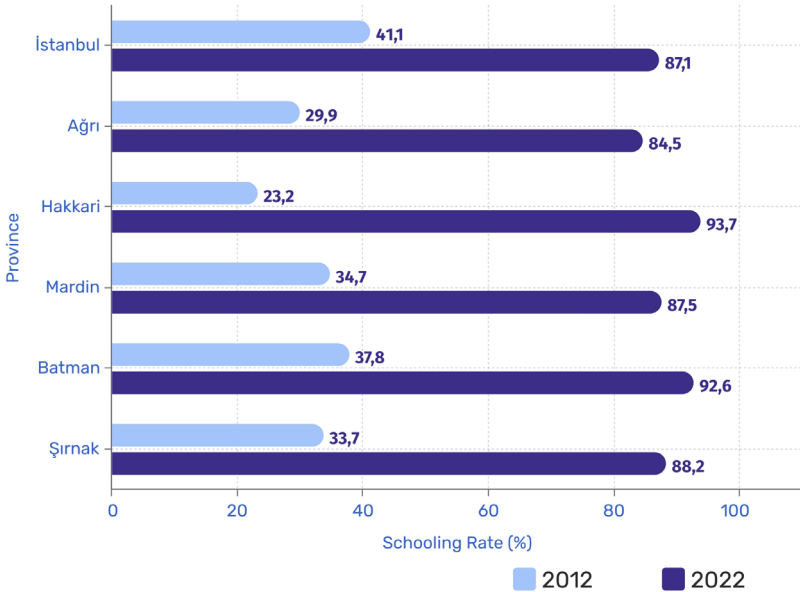
Figure 3c. 3-5 and 4-5 Year-Old Net Schooling Rates of Preschool Education between 2012 and 2022 by Gender*

b. Males



The provinces with the lowest schooling rates in 2012 were considered to determine how preschool enrollment increased in different provinces over time. The results of this analysis are provided in Figure 4.

Figure 4. The Change of Schooling Rates in Provinces with Lowest Schooling in 2012



As seen in Figure 4, between 2012 and 2022, significant increases were achieved in provinces with relatively low schooling rates in preschool education. The provinces with the highest increase were Hakkari (70.5%), Batman (54.8%), Ağrı (54.6%), Şırnak (54.5%), and Mardin (52.8%), respectively. In Hakkari, the lowest schooling rate in Türkiye, the increase in preschool enrollment from 23.2% to 93.7% in ten years demonstrates outstanding achievements in inclusiveness. Due to its high population, Istanbul is a particularly important exemplar of schooling rates; thus, its eight-year increase from 41.1% to 87.1% represents significant progress. Therefore, compelling advancements have been made in preschool education in the provinces with the lowest schooling rates across Türkiye.

Figure 5. The Change of Schooling Rates in Provinces with Lowest Schooling in 2012 by Gender

a. Female



Figure 5 indicates that the schooling rates in these provinces were nearly balanced by gender in 2022. While the largest gap between the schooling rates of males and females in these provinces was 5.8% in 2012, it decreased to 2.9% in 2022. The rates display a remarkable increase in schooling, and a significant decrease in the gender gap was achieved concurrently. Within this context, in some provinces with the lowest preschool enrollment, the enrollment of female students has surpassed that of male students over the last ten years, giving evidence that the gender gap in schools is narrowing.

Figure 5. The Change of Schooling Rates in Provinces with Lowest Schooling in 2012 by Gender

b. Male



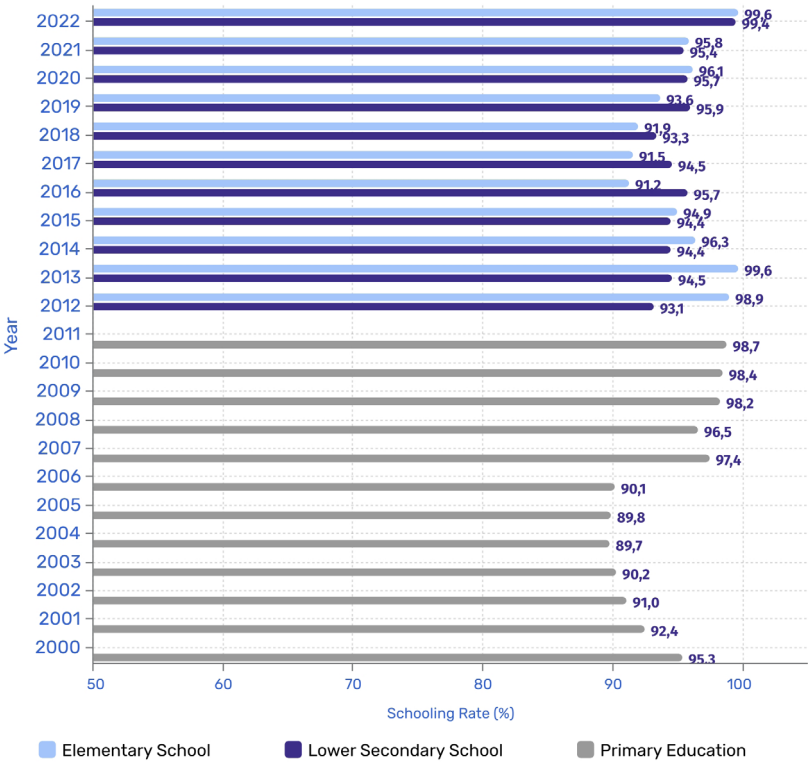
Access to Primary Education

Primary education is the education level in which students acquire both literacy skills and foundational skills for achievement in further education levels (Fidan & Baykul, 1994; OECD, 2005). As the first stage, where students interact within a school environment, primary education is essential for developing students' attitudes towards school and education.

The structure of primary education in Türkiye has changed remarkably over the last 20 years. While primary education was evaluated as a single statistical level (including elementary school and lower secondary school) between 2000 and 2011, a structural change in 2012 separated it into two statistical levels: primary and lower secondary school. Thus, schooling rates in primary education are shown in Figure 6, considering this structural change in the period before and after 2012.

As seen in Figure 6, primary schooling rates had a slight downward trend between 2000 and 2006 before increasing between 2007 and 2012. After 2012, when primary education was split into elementary and lower secondary schools, schooling rates varied between 98.9% and 93.6% in elementary schools and between 93.1% and 95.9% at the lower secondary level. It is also important to emphasize that the schooling rate peaked at 99.6% in 2022. The remarkable increase was crucial to present the recently developed monitoring mechanisms for access to education, leading to solid improvements swiftly. It is pleasing to achieve this increase just after the negativities of the COVID-19 pandemic.

Figure 6. Schooling Rates in Primary Education between 2012 and 2022*



Schooling at the lower secondary level generally increased between 2012 and 2021. At the elementary level, schooling rates decreased between 2012 and 2016; however, an increasing trend has been observed since 2016. Similar to elementary school, this trend peaked in 2022. Thus, the personal monitoring mechanisms that the MoNE developed significantly increased all primary education levels.

In general, the schooling rates at both the elementary and lower secondary level were over 90%, with partial fluctuations since 2012. The fact that the net enrollment rates given in Figure 6 are not 100% does not mean that a particular group of students do not attend primary education; instead, the gross enrollment rates at the primary level are above 100%, indicating that the students expected to be at the primary level are currently placed in lower or higher education levels.

The change in primary school enrollment by gender over the years is illustrated in Figure 7.

Figure 7. Schooling Rates in Primary Education between 2000 and 2022 by Gender*

a. Female

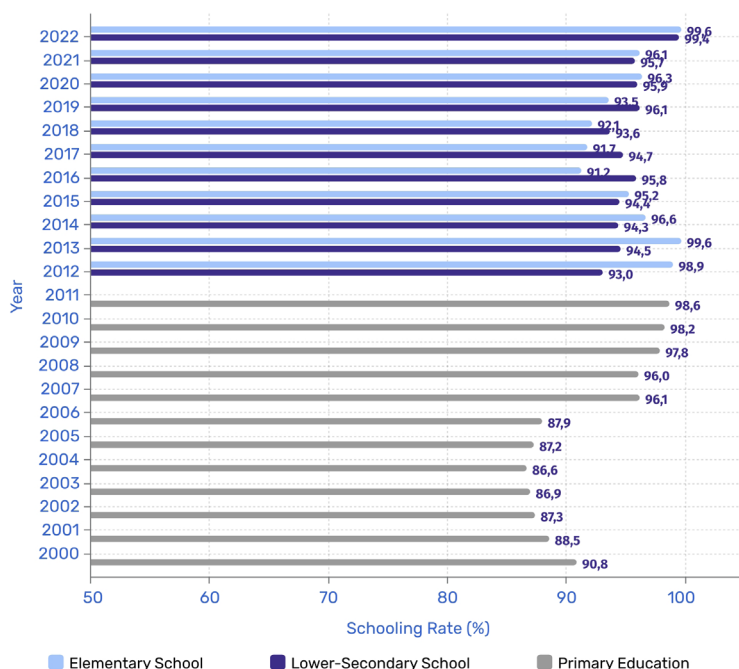
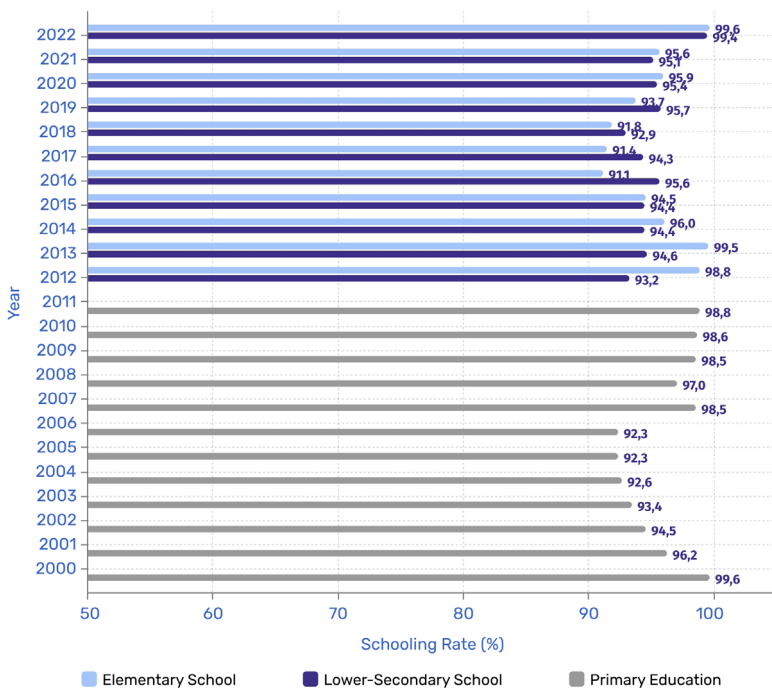


Figure 7. Schooling Rates in Primary Education between 2000 and 2022 by Gender*

b. Male



As seen in Figure 7, the schooling rates of girls and boys at the primary education level were relatively close, particularly between 2007 and 2022. Although the schooling rates of females were slightly below those of males between 2000 and 2006, the gap has narrowed since 2007 and was almost eliminated in 2022. It is also worth noting that the schooling rates peaked and reached at the same level in 2022 for both genders. Therefore, the schooling gap of nearly 10% between males and females in the early 2000s has diminished, with female schooling rates climbing relatively higher after 2016.

Another indicator of the relationship between schooling and gender is the gender ratio. Gross schooling rates are taken into account when calculating the gender ratio. Gender ratios higher than 100 mean that the schooling of females is higher and vice-versa. Figure 8 shows the change in gender ratios at the primary school level over the last 20 years.

Figure 8. Gender Rates in Primary Education Schooling between 2000 and 2022

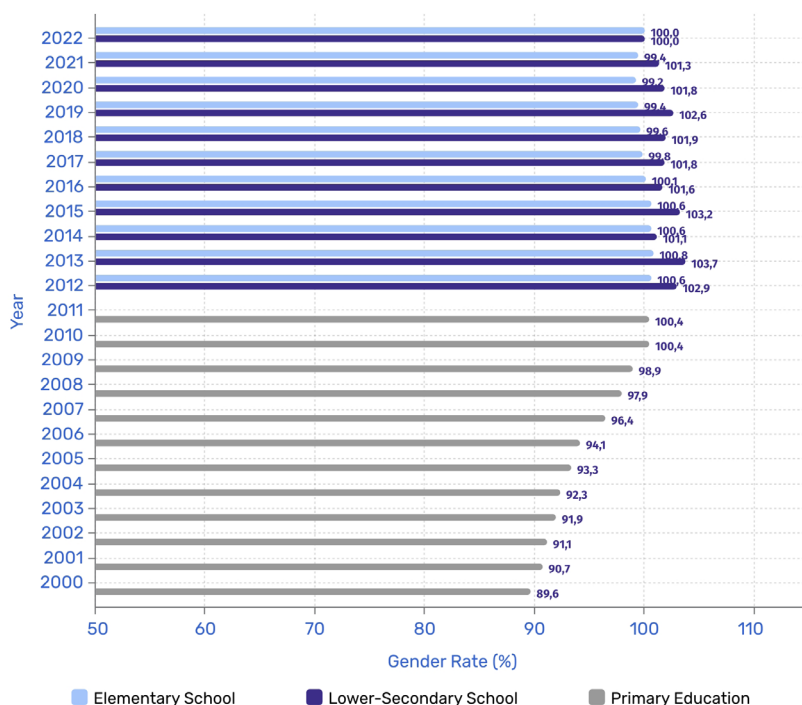


Figure 8 demonstrates a substantial change in the gender ratio at the primary level over the last two decades. Female schooling rates have increased significantly, with the gross schooling rate of female students exceeding the males' rate in the last ten years. After 2012, the schooling rates of female students at the

elementary school level exceeded that of male students, while the rates came very close at the lower secondary school level. In 2022, the gender rate reached 100% in both elementary and lower secondary education. This indicates almost identical schooling of students in both genders without any gap. Considering that the gender ratio was 89.6% and the enrollment rates of male students were higher in 2000, it is reasonable to assert that the schooling rates have reached a more gender-balanced level over the years.

Figure 9 reveals the change in schooling rates in the ten provinces with the lowest schooling rates in primary schools in 2008.

Figure 9. The Change of Schooling Rates in Provinces with Lowest Schooling in 2008



Figure 9 shows that schooling rates have increased and exceeded 92% in all ten provinces where primary school enrollment was relatively low in 2008. In Şanlıurfa, Muş, Van, Şırnak, Mardin, Bingöl, Siirt, and Bitlis, the schooling rates exceeded 97%, surpassing the Turkish average in 2021. The provinces that had historically seen low schooling rates at the primary education level have since increased their enrollment over the past two decades, thus bolstering inclusion.

Figure 10 reveals the change in the schooling rates of the aforementioned provinces by gender.

Figure 10 indicates a remarkable increase in schooling rates of both genders in the ten provinces. In other words, while schooling rates increased, the gender gap decreased correspondingly. The previous gender gaps of 7% in Van, 6% in Bitlis, 5% in Şanlıurfa, and 3% in Siirt were nearly all eradicated by 2021. Therefore, the gender gap in access to primary education has decreased over time, even in provinces that reported low schooling rates in earlier years.

Figure 10. The Change of Schooling Rates in Provinces with Lowest Schooling in 2008 by Gender*

a. Female



Figure 10. The Change of Schooling Rates in Provinces with Lowest Schooling in 2008 by Gender*

b. Male



Access to Secondary Education

Secondary education is a bridge that aims to improve students' skills for transition to either the labor market or higher education by building competencies in many subject areas (Maclean, 2001). Students at this level are generally aged 15–19 (Le Metais, 2003). Since the teenage years are a period of important biological and physiological developments, when students must also make critical decisions for their future, it is imperative to increase schooling rates for students at this age (Le Metais, 2003). While some education systems do not include upper secondary

schooling within the scope of compulsory education, it plays a vital role in supporting students’ movement toward higher education and increasing their employability (Hoff et al., 2018).

Figure 11 shows the number of students enrolled in upper secondary education, along with schooling rates at this level in Türkiye for the last 20 years.

Figure 11. Number of Students and Schooling Rates in Upper-Secondary Education between 2000 and 2021*

a. Number of Students

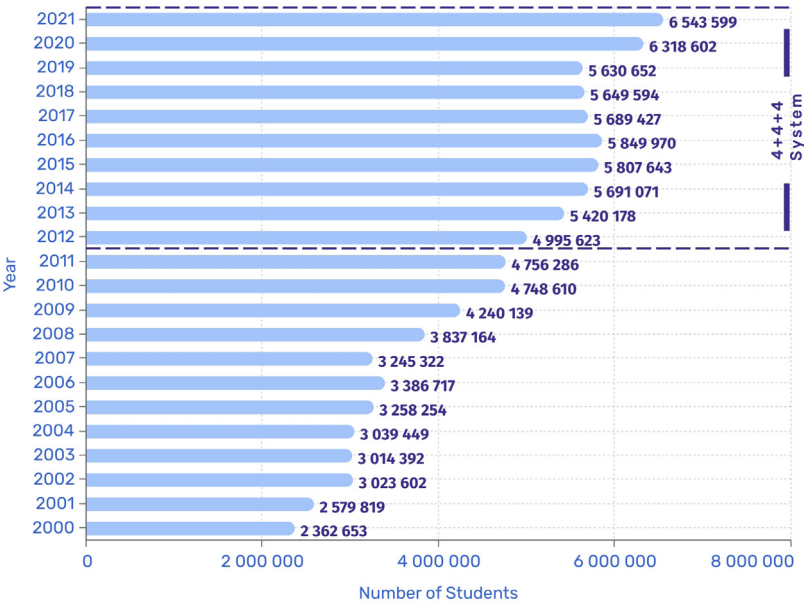


Figure 11. Number of Students and Schooling Rates in Upper-Secondary Education between 2000 and 2022*

b. Schooling Rate

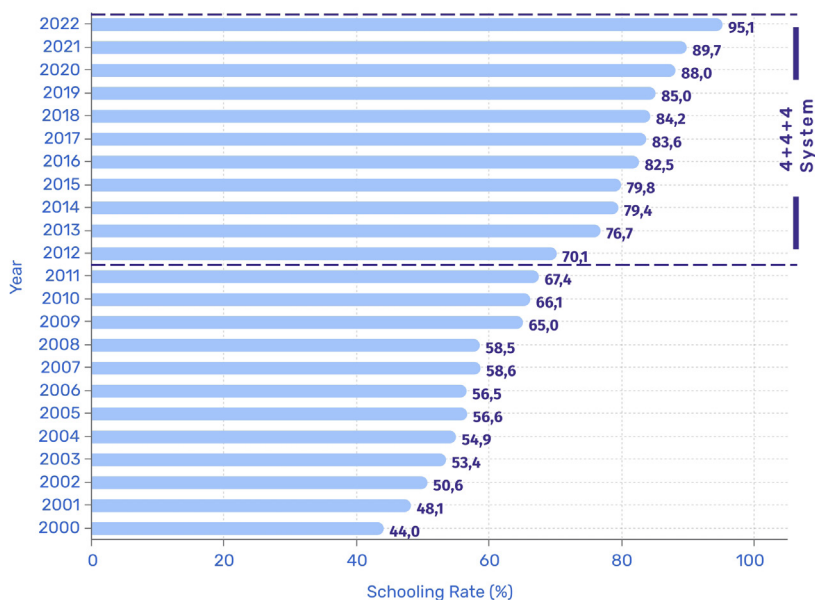
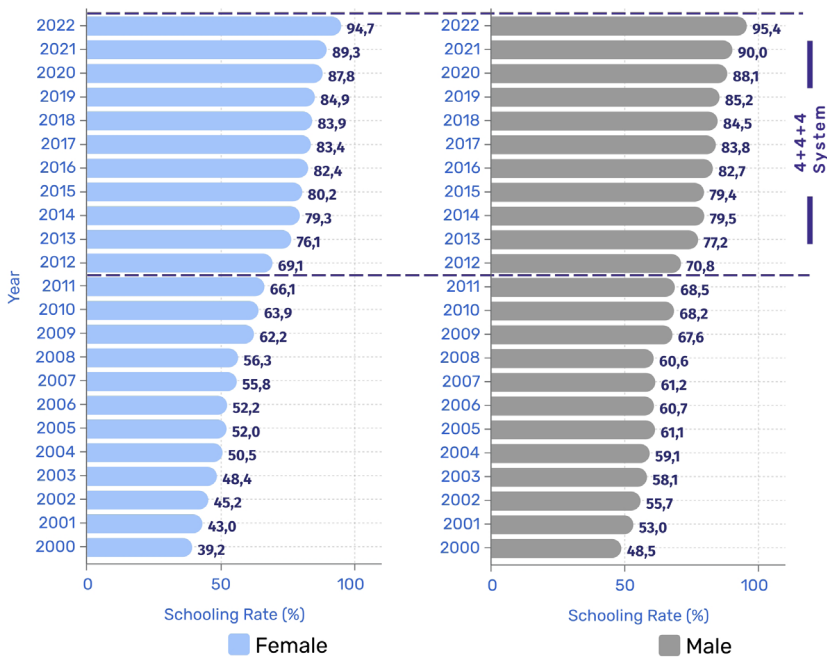


Figure 11 shows that schooling rates at the upper secondary level have increased significantly over the last 20 years, from 44% to 95.1%. In 2012, upper secondary education was included in the scope of compulsory education in Türkiye, significantly contributing to the increase in schooling rates. During this period, the schooling rate increased from 70.1% to 95.1%, representing a continuous increase, unlike the previous period. The increasing schooling rate was also accompanied by a tremendous increase in the number of students, from 2,362,653 to 6,543,599 in 20 years.

Figure 12 indicates the change in the schooling ratio at the secondary education level over the 20 years by gender.

Figure 12. Schooling Rates in Upper-Secondary Education between 2000 and 2022 by Gender*



As seen in Figure 12, schooling rates at the upper secondary level have increased significantly in the last 20 years, while the gender gap has decreased to a negligible level. It is important to note that the major increase in schooling rates -particularly in 2022- was achieved in both genders. After the transition to the 4+4+4 system (4 years of elementary school, 4 years of lower secondary school, and 4 years of upper secondary school within 12 total years of compulsory education) in 2012, the gap between the schooling rates of females and males dropped below 1% and reached its lowest

level. Therefore, the gender gap in secondary schooling, which was close to 10% in the 2000s, has thus decreased to less than 1%.

Figure 13 shows the change in gender ratios at the secondary level in the last 20 years.

Figure 13. Gender Rate in Upper-Secondary Education Schooling between 2000 and 2022*

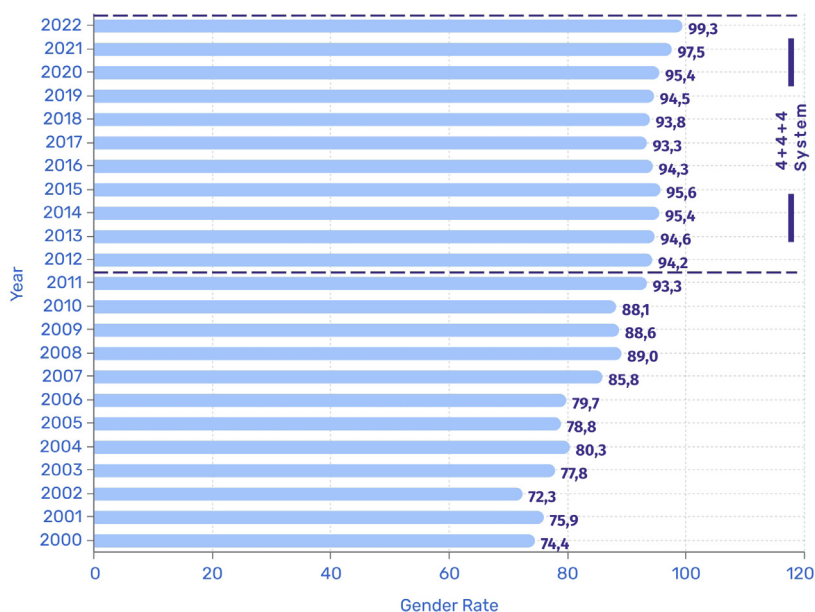


Figure 13 reveals that the gender ratio in secondary education has increased dramatically in the last 20 years, from 74.4% to 99.3%. Considering that a ratio of 100% indicates equal rates of male and female students in gross enrollment, the gender gap has narrowed significantly over two decades, showing greatly improved educational opportunities for females.

Figure 14 shows the provinces with the lowest schooling rates at the upper secondary level in 2008, as well as the change in schooling rates in 2021.

As seen in Figure 14, enrollment has increased significantly in all 12 provinces with the lowest upper secondary schooling rates as of 2008. Over the 14 years, the schooling rate in Ağrı, where secondary school enrollment was at the lowest level, increased from 21.8% to 72.3%. Among the 12 provinces, Van had the greatest increase between 2008 and 2021, at 53.4%. Therefore, the positive impacts of the inclusion of secondary education in the scope of compulsory education are distinct, even in the provinces where schooling is at the lowest level.

Figure 14. The Change of Schooling Rates in Provinces with Lowest Schooling of Upper-Secondary Education in 2008

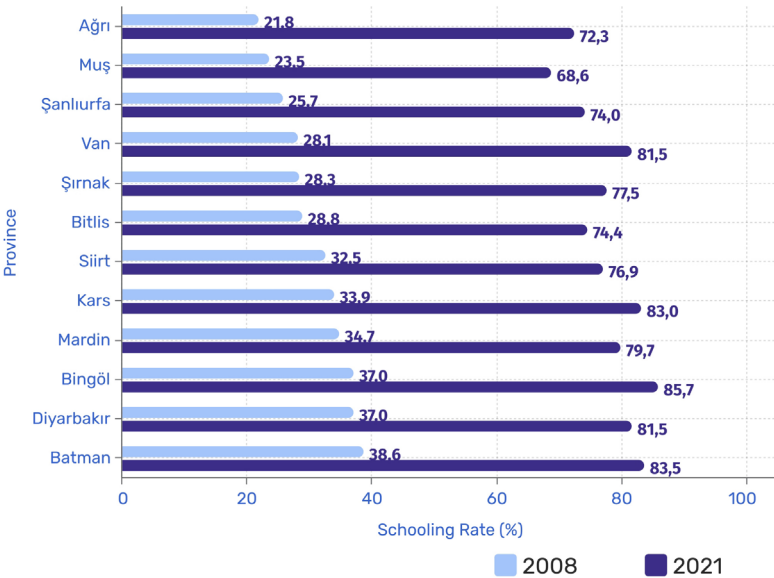


Figure 15 depicts the change in schooling rates by gender in the provinces with the lowest levels of upper-secondary schooling in 2008.

As seen in Figure 15, the enrollment rate in upper secondary schools increased simultaneously for both genders between 2008 and 2021. The gender gap in schooling rates also narrowed significantly. While Siirt saw the largest gender gap in upper secondary education at 18.8% in 2008, this rate decreased to 7.5% by 2021. Similarly, while the schooling rates of males were higher in all 12 provinces in 2008, the rates for females in Ağrı and Kars exceeded those of males in 2021. Therefore, schooling rates increased for both genders, and gender gaps diminished across the 12 provinces with the lowest schooling rates.

Figure 15. The Change of Schooling Rates in Provinces with Lowest Schooling of Upper-Secondary Education in 2008 by Gender

a. Female

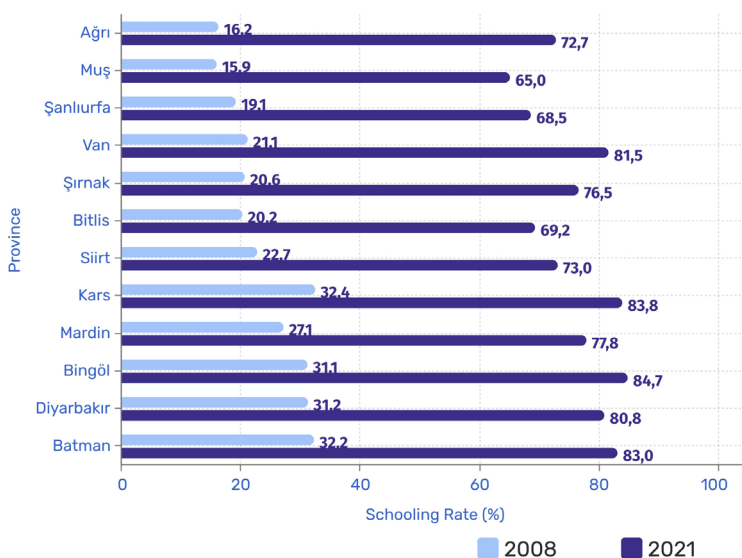
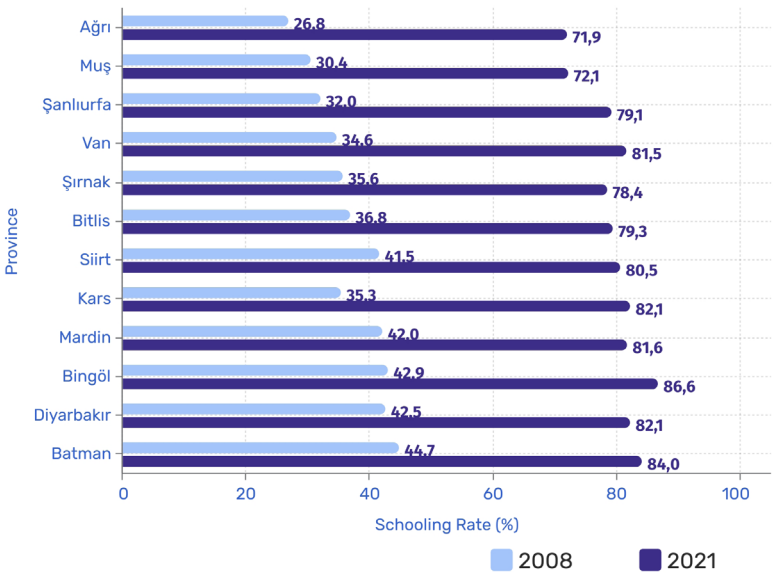


Figure 15. The Change of Schooling Rates in Provinces with Lowest Schooling of Upper-Secondary Education in 2008 by Gender*

b. Male



Access to Higher Education

Higher education is an educational level that enables individuals to acquire skills that match the rapid social, scientific, and economic changes in today’s society (Bikse et al., 2013). In most education systems, higher education seeks to develop human capital that can compete on a global scale and contribute to national growth (Bergan & Damian, 2010).

Higher education aims to provide effective training in which students acquire high-level cognitive and social competencies, including theoretical and practical skills. Thus, the scientific fields

are separated more strictly at this level than earlier schooling. Consequently, one of the key metrics used for measuring national development and comparing countries is the ratio of higher education graduates in the population and the ratio of individuals who have completed master's or doctorate-level degrees (Akçigit & Özcan-Tok, 2020).

Figure 16 shows the schooling rates at the higher education level in Türkiye over the last 20 years.

As seen in Figure 16, the schooling rate in higher education continually increased from the 2000-2001 academic year until 2017–2018. Over the last 20 years, the higher education schooling rate rose from 12.3% to 44.7%. This is especially important for Türkiye to raise an internationally competitive human resource through education. On the other hand, the rise in the number and rate of students in higher education indicates a social demand for higher education that policymakers should respond to on a national and regional level. However, researchers should also investigate the reasons for the slight decrease in schooling rates after 2017.

Figure 16. Number of New Students and Schooling Rates in Higher Education between 2000 and 2021

a. Number of New Students

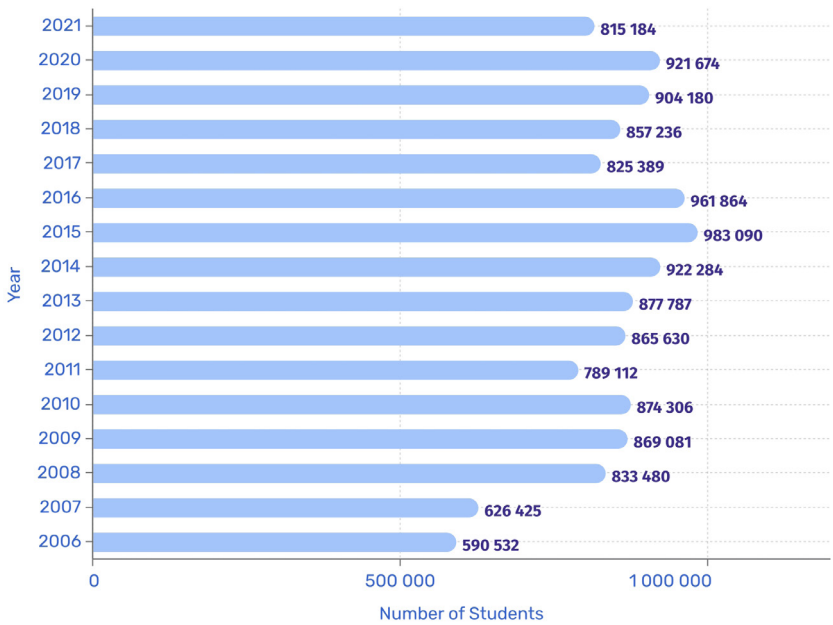
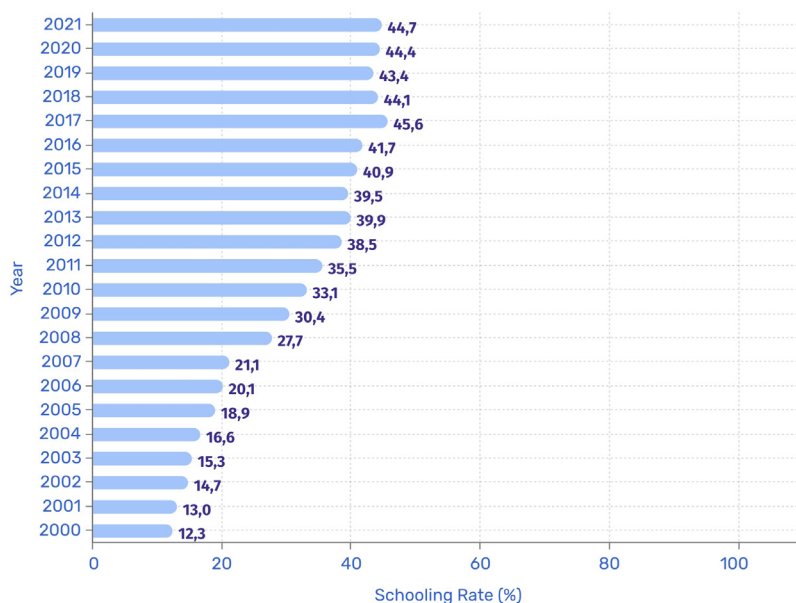


Figure 16. Number of New Students and Schooling Rates in Higher Education between 2000 and 2021

b. Schooling Rate



EDUCATIONAL INVESTMENTS

Budget of the Ministry of National Education

The budget allocated to education is a central indicator of the financial resources provided for schooling, as well as the value that a country attributes to education (OECD, 2021; Zoran, 2015). The benefits of education both at the individual and societal levels have led many countries to increase educational investments over the years (Roser & Ortiz-Ospina, 2016). These educational investments are used for various purposes, such as increasing the

number of students accessing education, improving schooling facilities and environments, providing materials and resources, and revising curriculum and programming in line with changing conditions (OECD, 2005). Education systems need resources to meet these needs, and the budget allocated for education is the primary source. Figure 17 shows the total budget and the budget per student allocated to the Turkish Ministry of National Education (MoNE) over the last 20 years.

Figure 17. Total Budget and Total Budget Per Student of MoNE between 2000 and 2022*

a. Total Budget of MoNE

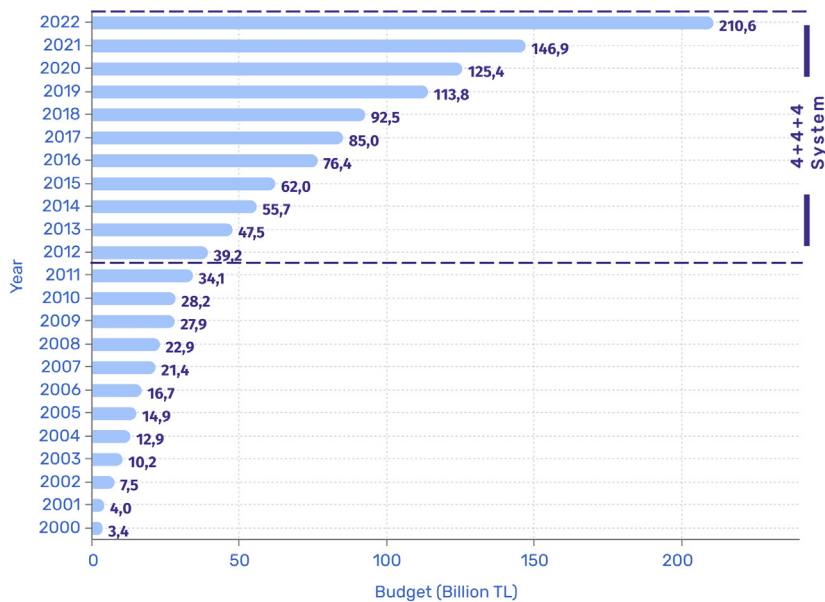
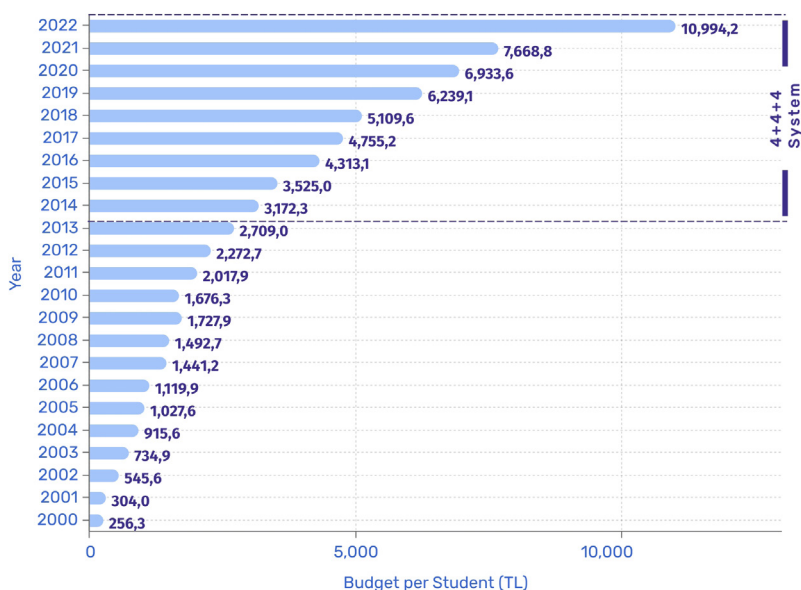


Figure 17. Total Budget and Total Budget Per Student of MoNE between 2000 and 2022*

b. Total Budget of MoNE Per Student



*The budget for higher education is excluded from the figures.

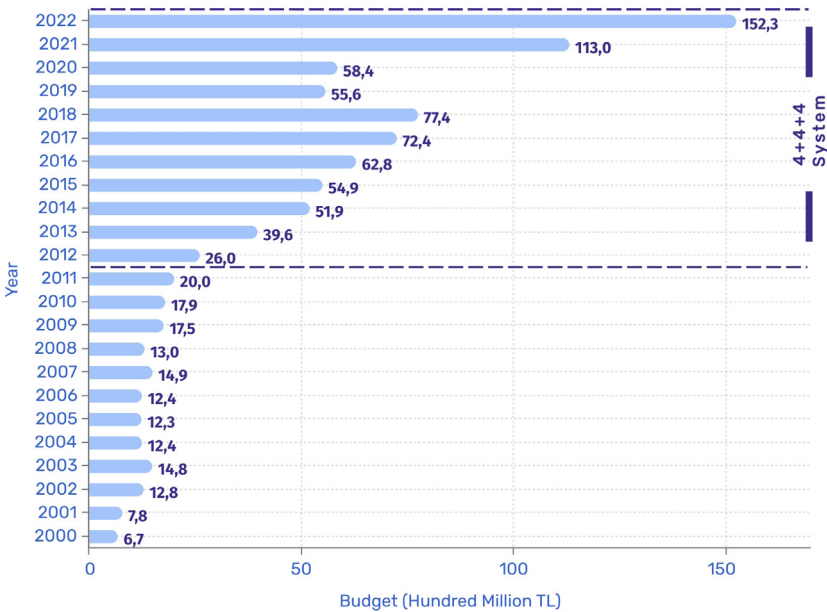
**Additional budget is included in 2022.

***The total number of students in 2022 is assumed to be the same as in 2021.

As seen in Figure 17, the budget of the MoNE has increased by more than 40 times in the last 20 years. This significant escalation in the total budget enables allocating more resources to educational needs. The MoNE budget per student is another indicator since the number of students has increased remarkably in diverse levels of education, as shown in the previous section. While the MoNE budget per student was 256 ₺ in the 2000–2001 academic year, it reached 10,994 ₺ in the 2022–2023 academic year. Therefore, the MoNE budget per student has also increased

significantly during this period. The MoNE budget allocated to education investments represents another critical indicator. The investment budget is the amount used for direct improvement and investments, excluding the routine expenses related to education processes (MoNE, 2019; OECD, 2005). As the investment budget increases, more investments are made for improving educational quality and access. Figure 18 shows the change in the investment budget of the MoNE in the last 20 years.

Figure 18. Investment Budget of MoNE between 2000 and 2021



As seen in Figure 18, the investment budget of the MoNE has increased simultaneously with the total MoNE budget. The investment budget was approximately 667 million ₺ in the 2000–2001 academic year, and reached 15.2 billion ₺ over the

past two decades. Although the investment budget showed an increasing trend in this period, it has accelerated since the 2012–2013 academic year and peaked in the 2021–2022 academic year. The inclusion of secondary education in the scope of compulsory education at that time required a significant increase in education investments, and the investment budget rose significantly to meet these needs.

Although both the total budget and investment budget of the MoNE have increased significantly since 2000, public education expenditure per student remains below the OECD average (OECD, 2019). While Türkiye showed the most considerable improvement in the OECD by increasing the total public education expenditure by 24% between 2010 and 2016, the average education expenditure per student in 2019 was about half of the OECD average (Türkiye \$5,633, OECD average of \$10,502) (OECD, 2019). The increase in public education expenditure per student in Türkiye is still remarkable: while the per-student average was approximately one-fifth of the OECD average in 2006 (Türkiye \$1,130, OECD average \$6,517) (Gür & Çelik, 2009), it reached nearly half in 13 years. Considering the relationship between budgetary investment and student outputs, the increase in educational resources may predict significant student performance increases.

Teachers

The significant development in schooling and the number of students across education levels over the last 20 years has led to an urgent prerequisite for more teachers. An increase in the number of teachers, in turn, decreases the average number of students per teacher (*student-teacher ratio*), thus increasing teacher-student interaction and creating a positive school climate (OECD, 2016; Rohatgi & Scherer, 2020). Student-teacher

interaction is also essential for developing social and emotional skills (MoNE, 2021; OECD, 2021). Equality of opportunity in education is bolstered by one-to-one contact between teachers and students, along with differentiated instruction that responds to students’ unique individual learning needs. In this context, the average number of students per teacher (student-teacher ratio) functions as an important indicator of equal opportunity in education (Metsamuuronen, 2019). Figure 19 shows the changes in the number of teachers at different education levels over the last 20 years.

As seen in Figure 19, the number of teachers significantly increased from preschool to upper secondary education levels. Efforts to increase schooling have played an imperative role in increasing the number of teachers at all levels.

Figure 19. Number of Teachers in Diverse Levels of Education between 2000 and 2021

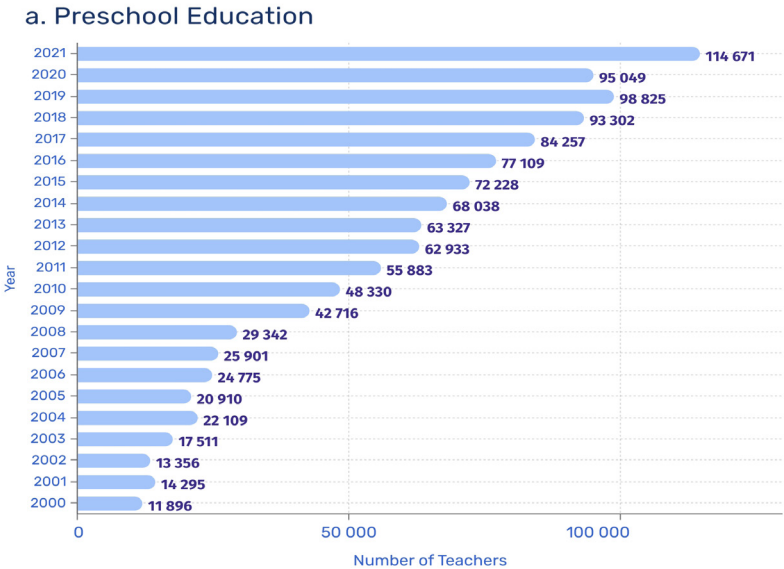


Figure 19. Number of Teachers in Diverse Levels of Education between 2000 and 2021

b. Primary Education (Elementary & Lower-Secondary School)

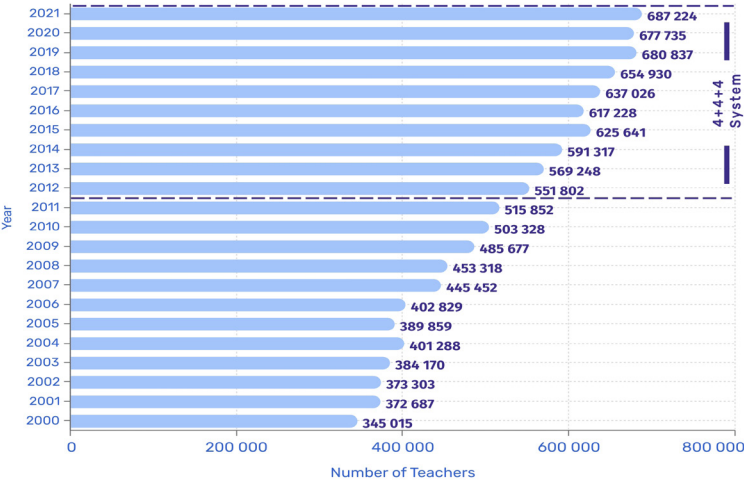
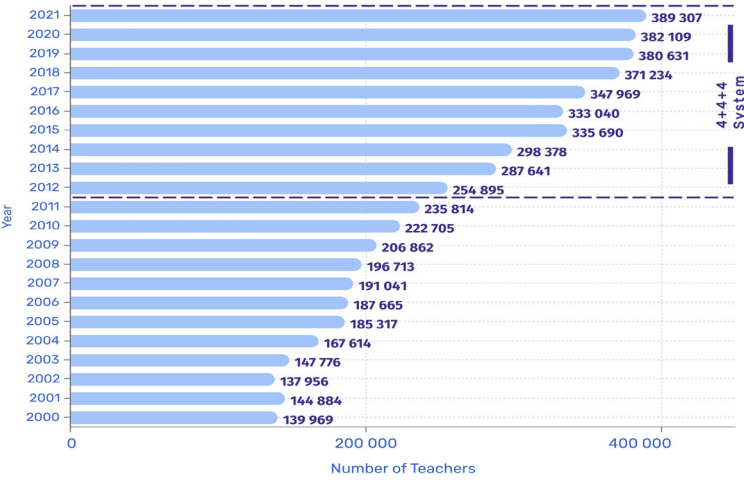


Figure 19. Number of Teachers in Diverse Levels of Education between 2000 and 2021

c. Upper-Secondary Education



As a result of these efforts, the number of teachers increased nearly nine-fold in preschool education, doubled in primary education, and tripled in upper secondary education. Along with teacher appointments, the number of students per teacher also showed significant changes over the 20 years; these changes are shown in Figure 20.

Figure 20 indicates the remarkable decrease in the number of students per teacher at all levels in Türkiye, from preschool to upper secondary education. In the last 20 years, the number of students per teacher has decreased from 19.1 to 16.4 despite a high increase in students and schooling rates. A similar pattern is seen for 30.4 to 15.6 in primary education. Lastly, the number of students per teacher decreased slightly from 16.9 to 16.8 in upper secondary education despite the doubled schooling rate and tripled the number of students in the same time interval.

Figure 20. Number of Students Per Teacher in Diverse Education Levels between 2000 and 2021

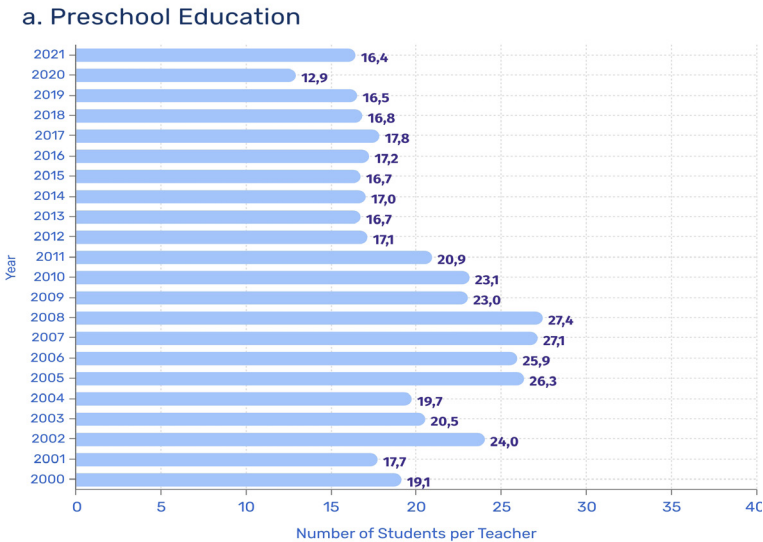


Figure 20. Number of Students Per Teacher in Diverse Education Levels between 2000 and 2021

b. Primary Education (Elementary + Lower Secondary Schools)

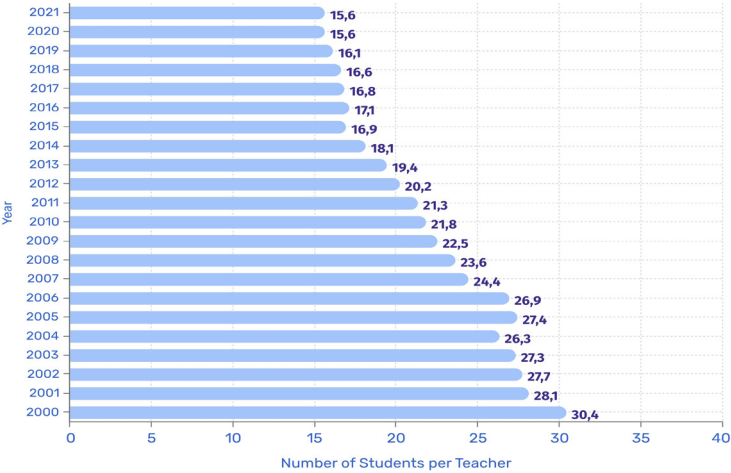
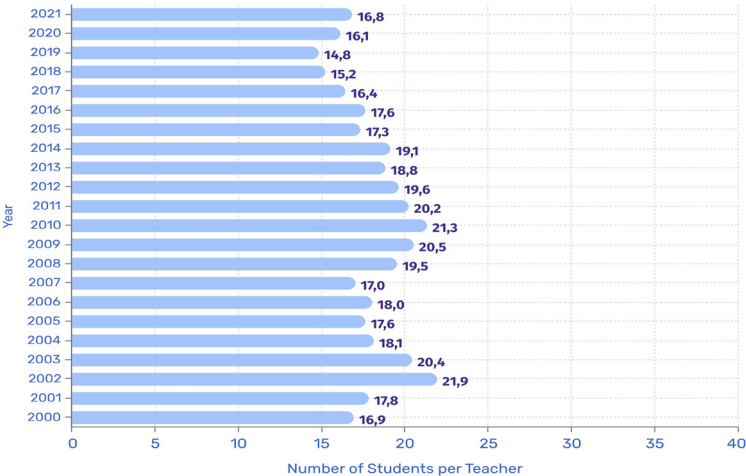


Figure 20. Number of Students Per Teacher in Diverse Education Levels between 2000 and 2021

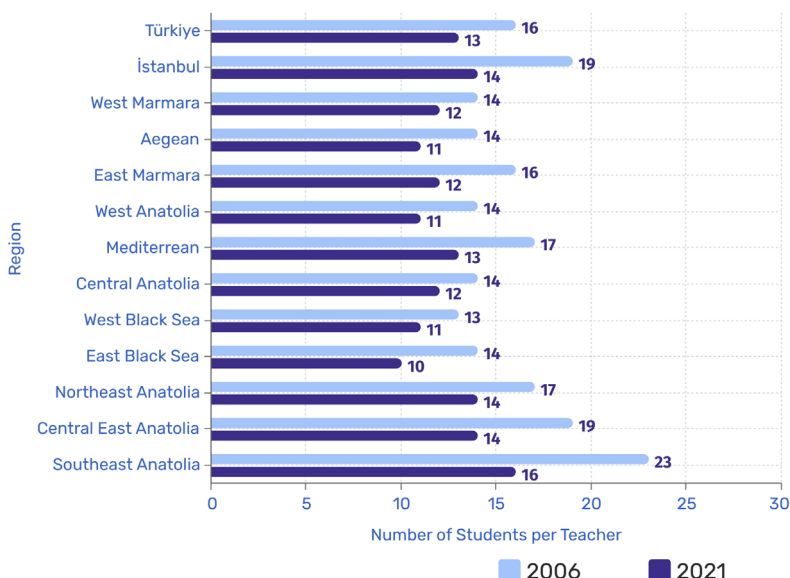
c. Upper-Secondary Education



It is important to note that these declines became stronger when compulsory education was extended to 12 years. Reducing the average number of students per teacher across these three education levels is important for teacher-student interaction and, thus, educational quality. Therefore, Türkiye has reduced the number of students per teacher by increasing the number of teachers while ensuring universalization in a large-scale education system.

Figure 21* shows the change in the number of students per teacher at the upper secondary level according to the Nomenclature of Territorial Units for Statistics (NUTS) between 2006 and 2021.

Figure 21. Number of Students per Teacher in Upper-Secondary Education between 2006 and 2021 by Regions



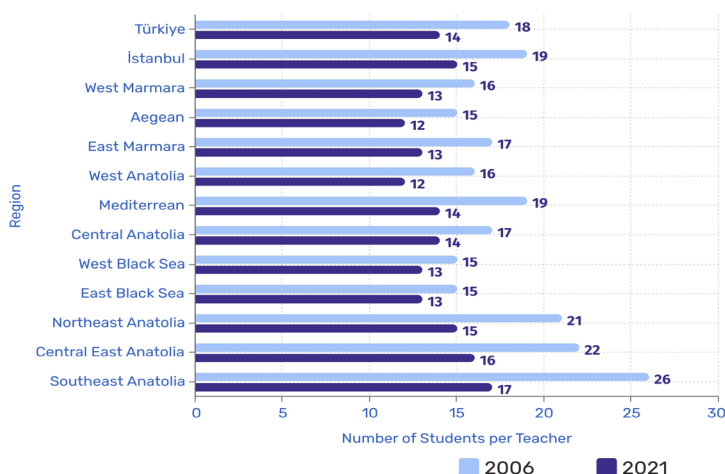
* When open education programs are excluded.

As seen in Figure 21*, the number of students per teacher at the upper secondary level has decreased significantly both at the regional level and across Türkiye. While the number of students per teacher in 2006 varied regionally between 13 (Western Black Sea) and 23 (Southeast Anatolia), these rates ranged between 10 (Eastern Black Sea) and 16 (Southeast Anatolia) in 2021. The decrease in the number of students per teacher at this level peaked especially in Southeast Anatolia (from 23 in 2006 to 16 in 2021), Central East Anatolia (from 19 in 2006 to 14 in 2021), and Istanbul (from 19 in 2006 to 14 in 2021). In other words, the decrease was more potent in regions where the number of students per teacher was relatively high in 2006.

Figure 22* indicates the change in the number of students per teacher between 2006 and 2021 at general upper secondary schools and VET upper secondary schools.

Figure 22. Number of Students per Teacher in General & Vocational Upper-Secondary Education between 2006 and 2021 by Regions

a. General Upper-Secondary Education



* When open education programs are excluded.

Figure 22. Number of Students per Teacher in General & Vocational Upper-Secondary Education between 2006 and 2021 by Regions

b. Vocational Upper-Secondary Education

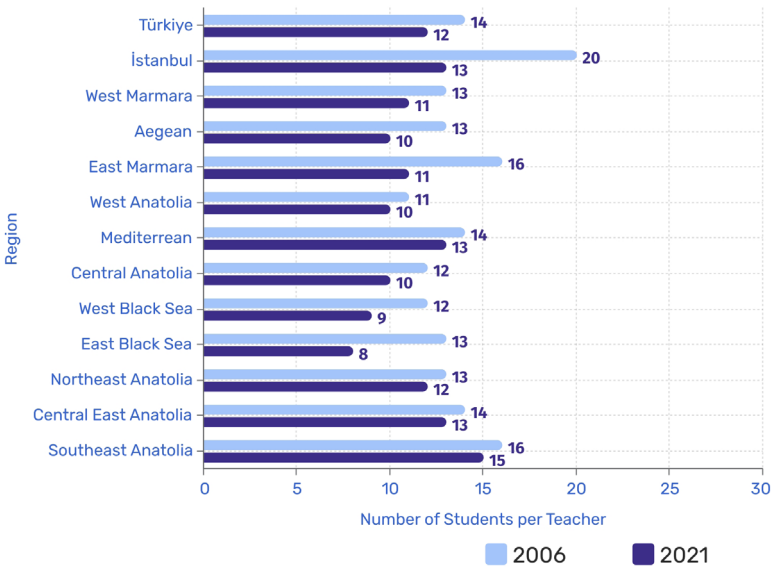


Figure 22 shows the trend of a decrease in the number of students per teacher at both general and VET upper secondary schools between 2006 and 2021. The regions with the highest number of students per teacher in general upper secondary education were Southeast Anatolia (26 in 2006, 17 in 2021), Central East Anatolia (22 in 2006, 16 in 2021), and Northeast Anatolia (21 in 2006, 15 in 2021). Other regions saw significant decreases as well.

The number of students per teacher in VET upper secondary education was generally below that of general upper secondary education in both years. This is primarily because teachers

from a greater variety of subjects and industries are employed in VET institutions, as well as the practice-oriented nature of vocational training. Additionally, the number of students per teacher decreased significantly at the regional level. The greatest decreases were seen in Istanbul (20 in 2006, 13 in 2021), East Marmara (16 in 2006, 11 in 2021), and East Black Sea (13 in 2006, 8 in 2021).

Schools and Classrooms

Young people make up a large proportion of Türkiye's population; thus, both the demand for education and schooling rates are increasing day by day. This has led to an urgent need for new schools and classrooms. Increasing the number of classrooms is especially critical for maintaining effective class sizes in a growing education system. Studies show that small class size contributes to a positive school climate by facilitating effective relationships between students, peers, and teachers (Lewit & Baker, 1997; Wang & Eccles, 2016).

Similar to the number of students per teacher, the number of students per classroom is also considered among the indicators of equal education opportunities (Metsamuuronen, 2019). Research has indicated that as class size increases, teachers cannot identify and address individual differences among students, thus preventing them from closely monitoring learners' performance and needs (Ellis, 1984).

In this context, Figure 23 shows the change in the number of schools across the three levels of education in Türkiye over the last 20 years.

As seen in Figure 23, the number of upper secondary schools nearly doubled over 20 years, from 6,291 to 12,804. Similarly, the number of preschool institutions almost tripled, from 8,255 to 36,644. The peak in 2021 was achieved with the "Early Childhood

Education Campaign” by the MoNE. The numbers of primary education institutions indicate the impact of the split between elementary and secondary schools. As mentioned previously, compulsory education in Türkiye was extended to 12 years in 2012 within the scope of the "4+4+4 system." Consequently, primary schools were re-classified at two sub-levels—elementary and lower-secondary schools—which contributed to the increase in the number of schools, along with newly built schools.

Figure 23. Number of Schools in Diverse Levels of Education between 2000 and 2021

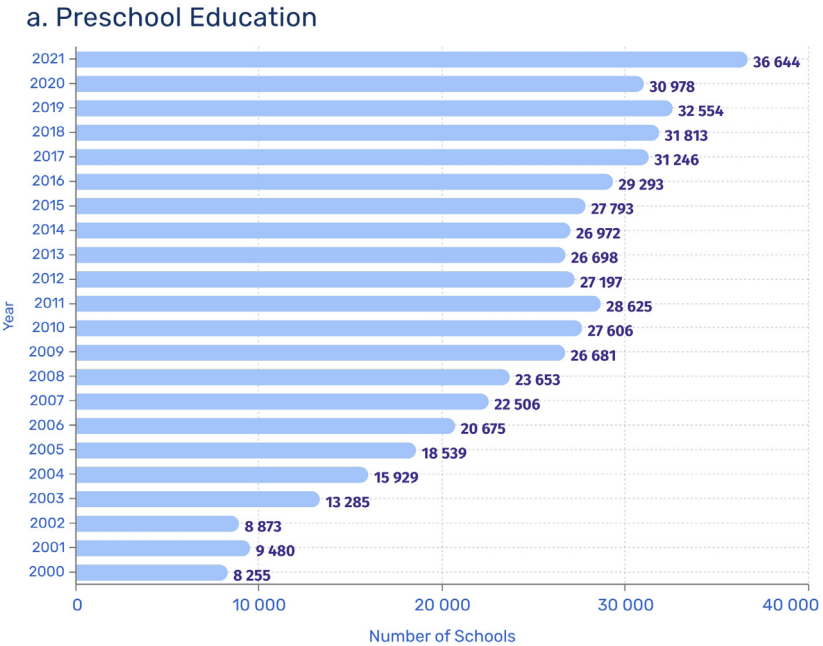


Figure 23. Number of Schools in Diverse Levels of Education between 2000 and 2021

b. Primary Education (Elementary + Lower-Secondary School)

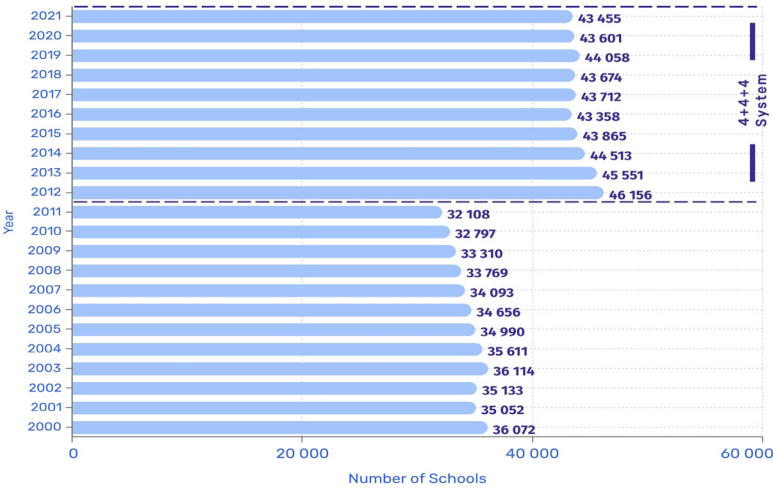


Figure 23. Number of Schools in Diverse Levels of Education between 2000 and 2021

c. Upper-Secondary Education

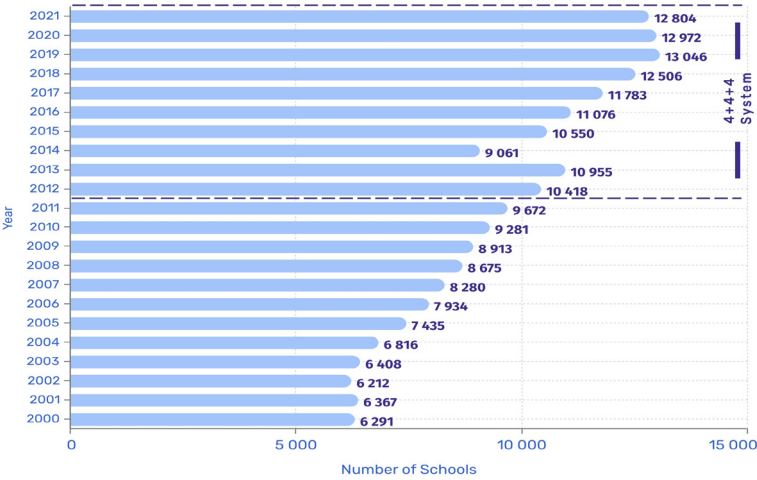


Figure 24 shows the distribution of the average number of students in schools between 2006 and 2021 by NUTS-1 regions.

Figure 24. Number of Students per School in Upper Secondary Education between 2006 and 2021 by Regions

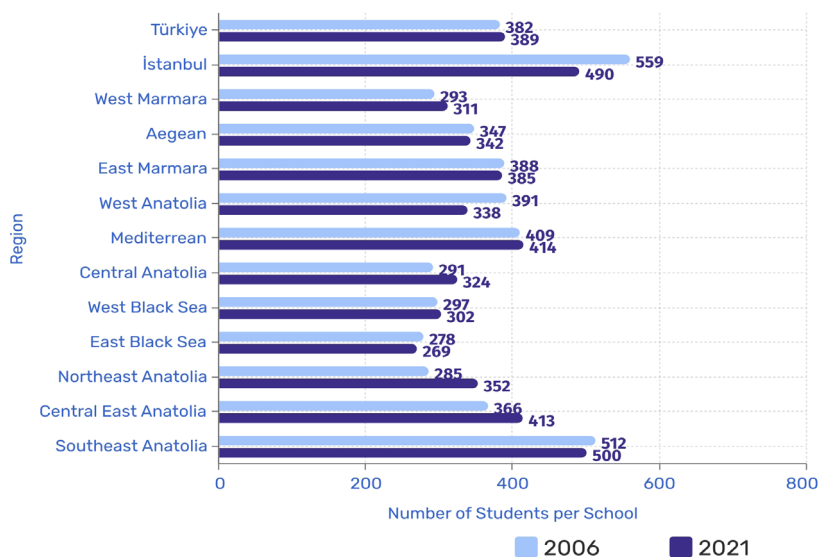


Figure 24 shows that the average number of students per school stays at a similar level in Türkiye via newly built upper secondary schools despite a high increase in students between 2006 and 2021. It is worth noting that the number of students decreased in the most crowded region of Türkiye, İstanbul (12.3%). Additionally, a significant decrease was seen in West Anatolia (13.5%). This shows that the major increase in the number of students did not lead to more crowded schools, and the MoNE made an adequate investment to keep the average number of students per school at a similar level.

Figure 25 illustrates the change in the average number of students in general upper secondary education and VET upper secondary education by region over the 20-year period.

Figure 25. Number of Students per School in General & Vocational Upper-Secondary Education between 2006 and 2021 by Region.

a. General Upper-Secondary Education

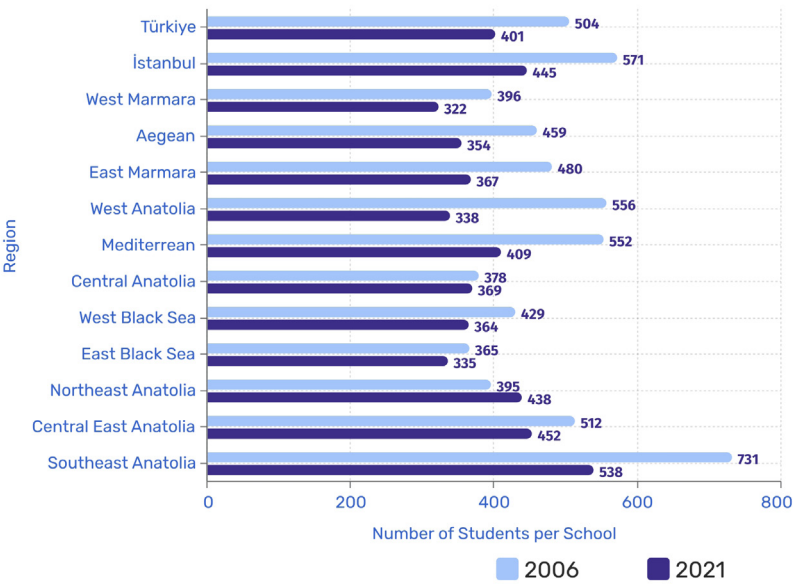
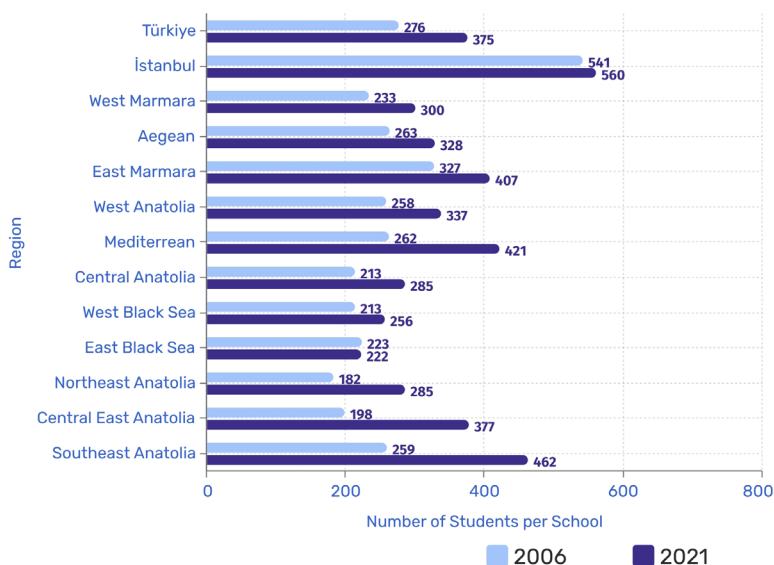


Figure 25. Number of Students per School in General & Vocational Upper-Secondary Education between 2006 and 2021 by Regions

b. Vocational Upper-Secondary Education



As seen in Figure 25, the average number of students in general and VET upper secondary education institutions changed significantly over the years by region. The average number of students in general upper secondary education institutions decreased across Türkiye (504 in 2006, 401 in 2021). The decreasing trend is also seen in regions including Southeast Anatolia (731 in 2006, 538 in 2021), Istanbul (571 in 2006, 445 in 2021), West Anatolia (556 in 2006, 338 in 2021), and the Mediterranean (552 in 2006, 409 in 2021). In contrast, there was a slight increase in Northeast Anatolia (395 in 2006, 438 in 2021), making this region an exception in terms of the change in the average number of students.

Moreover, the average number of students per school in VET upper secondary education tended to increase considerably. Along with the increasing number of VET students per school nationwide, an increasing trend was identified in 11 of the 12 regions. Considering the fact that the average number of students per school is lower compared to general upper-secondary schools, this indicates that more students have chosen VET in recent years. Across Türkiye, the average number of students in VET schools increased from 276 in 2006 to 375 in 2021. The rising trend in the average number of students at VET schools is especially high in Southeast Anatolia (259 in 2006, 462 in 2021), Central East Anatolia (198 in 2006, 377 in 2021), and the Mediterranean (262 in 2006, 421 in 2021). Contrary to other regions, the average number of students in the VET schools in Istanbul (541 in 2006, 560 in 2021) and the Eastern Black Sea (223 in 2006, 222 in 2021) stayed at the same level.

Figure 26 shows the change in the number of classrooms at different education levels in Türkiye between 2006 and 2021.

Figure 26. Number of Classrooms in Diverse Levels of Education between 2006 and 2021

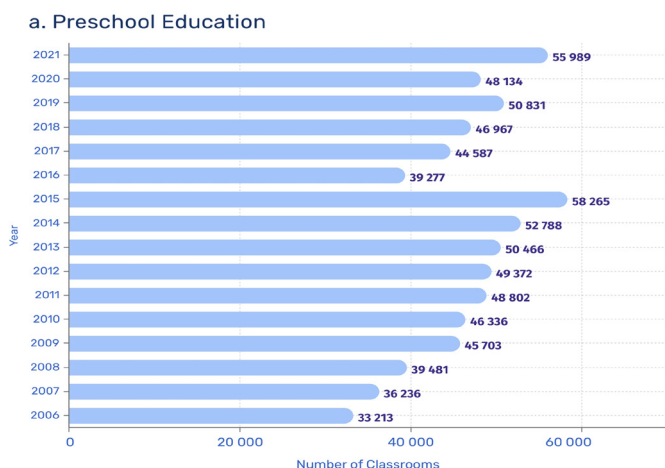


Figure 26. Number of Classrooms in Diverse Levels of Education between 2006 and 2021

b. Primary Education (Elementary + Lower-Secondary School)

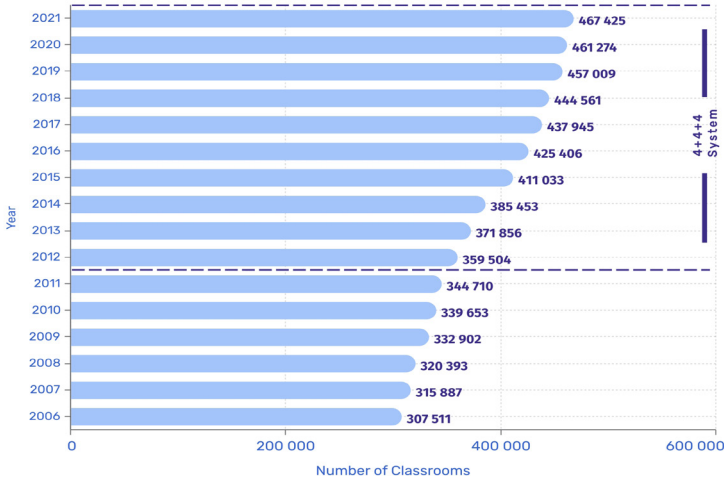


Figure 26. Number of Classrooms in Diverse Levels of Education between 2006 and 2021

c. Upper-Secondary Education

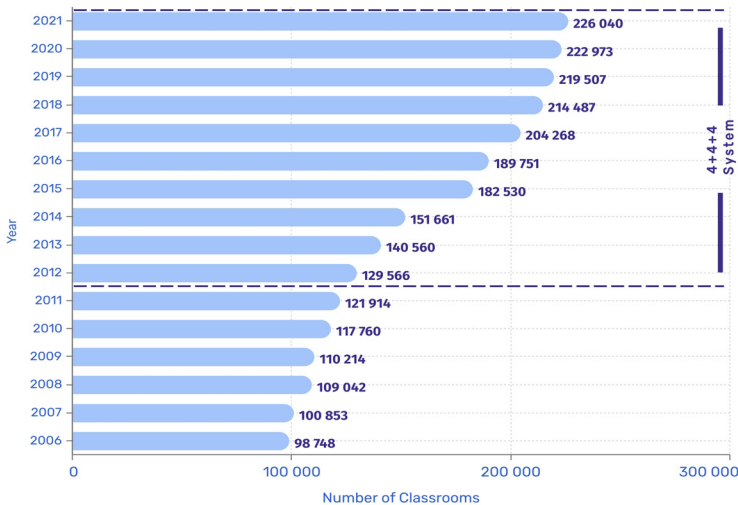
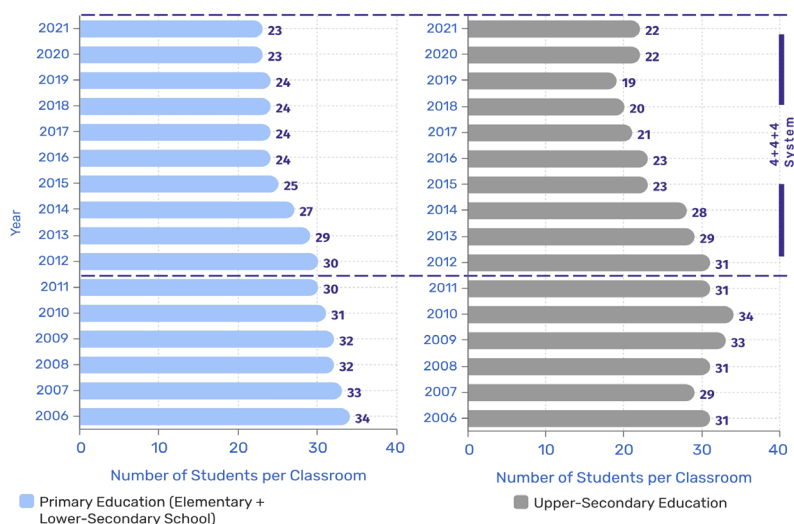


Figure 26 indicates a significant increase in the number of schools and classrooms at all levels in the last 20 years. The preschool level saw the highest percentage increase in schools, with approximately four times more in the last 20 years. Furthermore, the transition to 12-year compulsory education in 2012 led to a significant increase in the number of upper-secondary education institutions as well. The large increases in the number of schools also led to a major rise in the number of classrooms. In the 16 years between 2006 and 2021, the number of classrooms at the preschool level increased by 68.6%, while the primary level saw a 52% increase, and the upper secondary level saw a 128.9% increase. Given this significant growth in the number of classrooms, the change in the average number of students per classroom is provided in Figure 27*.

Figure 27. Number of Students per Classroom in Diverse Levels of Education between 2006 and 2021

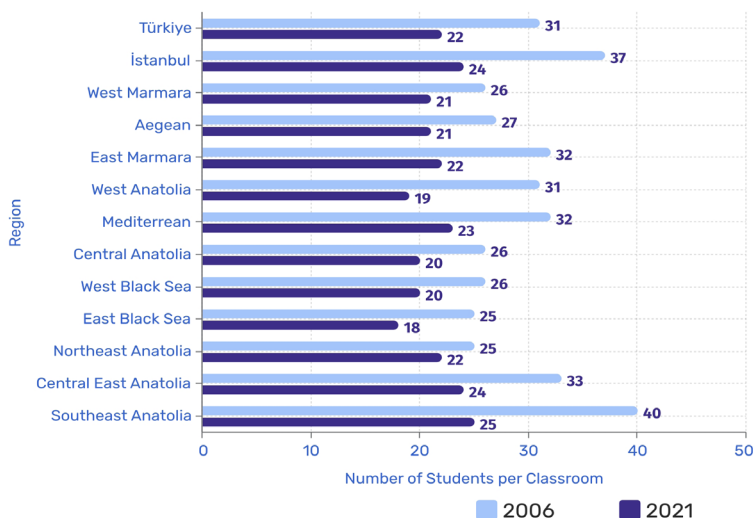


* When open education programs are excluded and active classrooms are considered.

Figure 27* demonstrates how the average number of students per classroom decreased significantly between 2006 and 2021 at the primary and upper-secondary levels. This ratio decreased from 34 to 23 for primary education and from 31 to 22 for upper secondary education. Thus, as of 2021, Türkiye has approached the OECD average student per classroom ratio of 21 and 23 for primary and lower-secondary education, respectively (OECD, 2012). However, since the number of students at each education level has not changed significantly in OECD countries and even decreased in some instances, this improvement must be based on a major investment aiming to increase the number of classrooms.

Finally, Figure 28* shows the change in the number of students per classroom in upper secondary education between 2006 and 2021 by region.

Figure 28. Number of Students per Classroom in Upper-Secondary Education between 2006 and 2021 by Regions



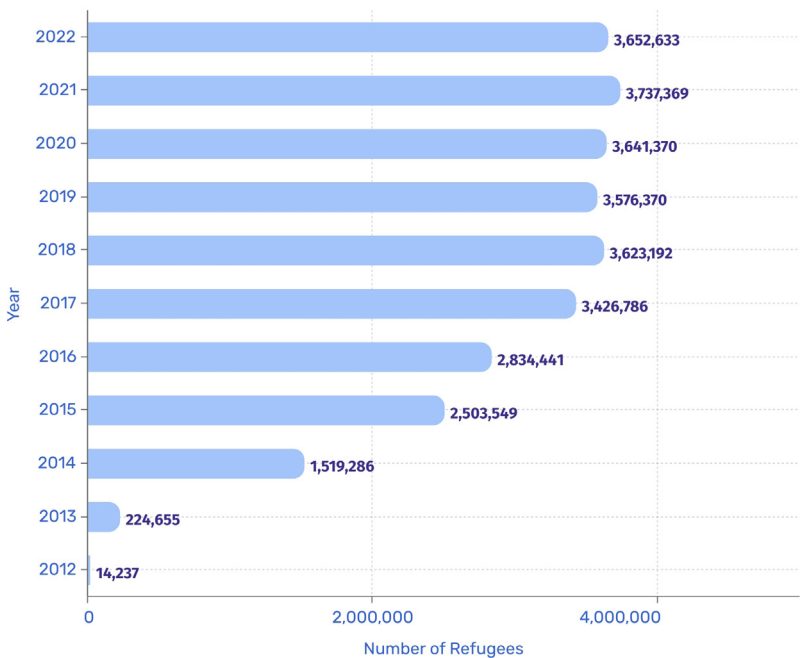
* When open education programs are excluded and active classrooms are considered.

As seen in Figure 28, the number of students per classroom in upper secondary education decreased significantly between 2006 and 2021. While these classrooms held an average of 31 students in 2006 across Türkiye, this number decreased to 22 in 2021. This decrease in the average number of students per classroom was observed across all 12 regions. While the average number of students per classroom ranged from 25 (Eastern Black Sea and Northeast Anatolia) to 40 (Southeast Anatolia) in 2006, it reached between 18 (Eastern Black Sea) and 25 (Southeast Anatolia) in 2021. Among the regions, the largest decreases were in Southeast Anatolia (40 students in 2006, 25 in 2021), Istanbul (37 students in 2006, 24 in 2021), West Anatolia (31 students in 2006, 19 in 2021), and Central East Anatolia (33 students in 2006, 24 in 2021), and respectively. This finding is particularly noteworthy, as it demonstrates a greater decrease in the regions that reported relatively higher average numbers of students in secondary education classrooms in previous years.

EDUCATIONAL SERVICES & SOCIAL SUPPORTS FOR SYRIAN MIGRANTS

As of 2022, Türkiye hosts more than 3.5 million Syrian refugees. As shown in Figure 29, this situation has caused Türkiye to be among the countries hosting the highest number of refugees in the world after the Syrian civil war that started in 2011 (UNHCR, 2022). The onset of a significant migration influx in a short time and the arrival of immigrants fleeing the war to Türkiye necessitate the implementation of the necessary mechanisms for these immigrants to benefit from their fundamental rights, especially education.

Figure 29. The Number of Refugees in Türkiye between 2012 and 2022



In 2011, as a result of the migration of those affected by the war to Türkiye, temporary living spaces were created primarily in regions close to Syria. During this stage, under the services provided to immigrants, there was the assumption that the war would end soon and the Syrians would return to their country of origin. Thus, an educational approach based on the Arabic language and Syrian curriculum was followed in the provided education services in the established living spaces and Temporary Education Centers (TECs). The approach understood that students are involved in an education process similar to their own country, continuing their education until the end of the war and then continuing their education in their country from where they left off.

However, the ongoing Syrian civil war made it necessary to change these approaches to the education of Syrian students. Since 2014, education policies have been re-evaluated, considering that Syrian immigrants can stay in Türkiye for a more extended period. As of this date, the education given in TECs started to be replaced by public schools, and a decision was made to gradually shut down these centers. As a consequence of this decision, students started to receive education in Turkish public schools, and integration classes were commenced in which intensive Turkish language education was offered to foreign students.

Therefore, Syrian students started to be included in the Turkish education system in 2014 in real terms. Before this date, students who received education in the Arabic language and with the curriculum of their country were in isolated environments. Subsequently, they started to receive education under the same conditions as Turkish students and with the existing education programs in Türkiye. As of 2022, the number of Syrian students of schooling age in Türkiye is over 1.1 million. Many projects are carried out to ensure that these students are effectively included

in the Turkish education system and have similar opportunities to other students.

Promoting Integration of Syrian Children into the Turkish Education System (PICTES) Project

PICTES is the longest-term and most comprehensive project carried out by the MoNE with the European Union (EU) to integrate Syrian students into the Turkish education system. The project, whose first phase was carried out between 2016 and 2019 and whose second phase has been implemented since 2018, aims to provide multiple support to Syrian students.

The support provided to Syrian students within the project scope can be classified into four groups: physical support, language support, academic support, and teacher training. Within the scope of physical support, various supports are provided to students for clothing, food, and educational materials to continue their education. In other words, support is provided to Syrian students to meet their basic stationery needs and school uniforms. Until the end of the 2021-2022 academic year, stationery support was provided to more than 2.1 million students, approximately 1.1 million of whom were of Syrian origin.

The second support category includes language support. As many studies have shown, language skills are among the most important factors for the educational attainment and achievement of immigrants (Cobb-Clark, Sinning & Stillman, 2012; OECD, 2006). Additionally, studies show that immigrant students with adequate language skills are more successful in education, stay in education longer, and their employment opportunities increase (Isphording, 2015; Pieroni, d'Agostino & Lanari, 2019). In this context, Turkish language support constitutes one of the essential areas in the PICTES project. With this perspective, Turkish language instructors are employed to work on the

PICTES project. Experts in language teaching have provided Turkish language training to more than 551,000 Syrian students to date. On the other hand, the production of digital and printed educational materials as well as additional resources to support students' Turkish language education continues.

Another support for the project is the academic support provided to the students. As it is known, immigrants have the potential to experience problems in education due to various disadvantages, especially language skills (OECD, 2015; Suna et al., 2022). For this reason, it is imperative to support immigrant students academically and to activate remedial mechanisms when necessary (Nicolai, Wales & Aiazzi, 2017; Ruiz-de-Velasco, Fix & Clewell, 2000). Such support is critical for increasing students' educational success, keeping them in the education system, and helping them develop self-confidence.

Within the scope of the PICTES project, remedial and academic support programs are carried out for immigrant students. In particular, applications are carried out for students who have been excluded from formal education for various reasons and who have taken a break from their education to re-access an education level appropriate for their age. Firstly, the competencies of these students are determined, and then they are provided with additional academic support to reach the level of their peers. Currently, more than 45 thousand students who have dropped out or taken a break from education have participated in these trainings, and more than 17 thousand students have attended these trainings after the integration class.

The last support within the project's scope is for teachers' development. Immigrant students have different disadvantages and constitute a fragile group (McIntyre, Barowsky & Tong, 2011). In this context, within the scope of the PICTES project, instructors

are employed to improve their Turkish language skills, on the one hand, preserve their Arabic skills, on the other hand, and receive support in the psychological counseling processes. As of the end of the 2021-2022 academic year, more than 3,000 instructors are employed to improve the language skills of immigrant students and to carry out effective psychological counseling processes. In-service training activities are implemented in order to increase the quality of the education provided by these teachers with immigrant students. In this context, more than four thousand teachers of the MoNE and more than three thousand PICTES instructors participated in in-service training activities in the same education year.

Conditional Cash Transfer for Education (CCTE) Program for Refugee Children

Inadequate financial conditions are among the most critical problems accessing education for immigrant families (OECD, 2015). Immigrant children may significantly suffer many problems in the education process due to the financial difficulties experienced by their families and may face school dropouts (Hippe & Jakubowski, 2018). For this reason, financial aid to immigrant families is essential for students' access to education.

Conditional education supports are among the support methods used in many countries (Özer, Gençoğlu & Suna, 2021). In this context, monthly assistance is provided to families with various disadvantages, provided that they regularly send their children to education and monitor their absence (Özer, Gençoğlu & Suna, 2021). The scope of the Conditional Cash Transfer for Education (CCTE), which has been implemented in Türkiye since 2003, was expanded in 2017, from which immigrant children could also benefit. The extension of CCTE was increased with the

cooperation between the Ministry of Family and Social Services, the Turkish Red Crescent, the MoNE and UNICEF.

In the payments made within the scope of the program, positive discrimination is made for female students with higher payments. In order for families to receive conditional education assistance, their children must not be absent for more than four days a month. The number of children who have benefited from the CCTE program at least once since May 2017, when the sub-program was launched, is over 794 thousand. It is important to note that while the number of students who benefited from the program while continuing their education in May 2017 was 56 thousand, this number increased to approximately ten times, with over 510 thousand in 2022.

Accelerated Education Program (AEP)

Chronic absence and school drop-out are common among refugee students (UNESCO & GEM, 2016). Such negative behaviors can be seen more frequently, especially in vulnerable groups such as Syrian refugees fleeing the war. If this situation is not compensated in various ways, the probability of students being completely alienated from the education system increases (UNESCO & GEM, 2016; UNICEF, 2015).

Accelerated Education Program (AEP) aims to enable students who have been absent from formal education due to various reasons or who have never started formal education despite being of education age to receive education together with their peers. In this context, AEP primarily enables a fragile student group to focus on education, which is highly likely to be disconnected from learning. Support mechanisms such as AEP are fundamental for these students to overcome their disadvantages and reach similar educational levels to their peers.

Within the scope of AEP, immigrant students can reach the education level of their peers by providing Turkish education for up to 16 months. AEP, which started in 2017, is implemented in 75 Public Education Centers located in 12 provinces where immigrants are concentrated. After the training and given an equivalence certificate, students who are evaluated by the Provincial Equivalency Commissions are provided with training with their peers.

Social and Economic Cohesion through Vocational and Technical Education (SEUP)

Vocational Education and Training (VET) provide important opportunities for the education of immigrants with its flexible solutions and employment-oriented structure (British Council, 2018; Jeon, 2019). Immigrants can gain vocational skills according to their talents or interests, and the labor market can employ them with the skills they have developed in a short time. The on-the-job training structure of VET enables students with various academic skill deficiencies to gain vocational skills while eliminating these deficiencies over time (British Council, 2018; Jeon, 2019).

Moreover, the process of acquiring the vocational skills of immigrant students includes many additional gains. While students receive on-the-job training, they can also observe the business culture and climate in Türkiye. In addition, they earn a wage, and are insured against work accidents and diseases (Özer, 2021). Considering that the employment rate of students who graduated from VET institutions is relatively high, VET provides important opportunities for immigrants.

Social and Economic Cohesion through the Vocational and Technical Education Project (SEUP) has been implemented within the scope of the cooperation between the German Development Bank and the MoNE. SEUP aimed to explain the benefits of VET to immigrant students and accelerate their transition to the VET system. With this project, information campaigns are carried out in many cities with dense immigrant populations, and the project details are shared through advertisements prepared in Arabic and Turkish. During the pandemic, the physical infrastructure of more than 55 VET high schools was improved, clothing aid was provided to nearly 2,000 students, and approximately 4 thousand tablets were distributed in a single year. Students were provided with on-the-job training in real work environments and were provided with the opportunity to have employment priorities upon graduation.

Program for Facilitating the Access of Syrian and Host Communities to Employment through Quality Apprenticeships and Vocational Training in Türkiye (IMEP)

As stated, VET brings significant opportunities for immigrants. However, it also has the potential to provide additional opportunities due to its apprenticeship structure (Özer, Suna & Numanoglu, 2021). Apprenticeship, which is typically based on a master-apprentice relationship, aims to provide students with vocational skills through intensive on-the-job training (Aerne & Bonoli, 2021; Özer, Suna & Numanoglu, 2021). In this process, students are trained directly by the masters and develop skills by working in real business environments four days a week.

Apprenticeship is given in Vocational Training Centers (VTCs) in Türkiye and is among the types of education with the highest employment participation rate of students (Özer & Suna, 2020).

A study on the subject shows that 88% of graduates work in their field of education, and approximately 75% of them work in companies where they receive on-the-job training (Özer & Suna, 2020). VTC programs, which are similar to the dual system in Germany, significantly increase the employment opportunities of graduates with their high practical training structure. Moreover, application to VTC programs is quite flexible: the only condition is a lower secondary school diploma with no age limit.

The MoNE has taken essential steps to increase the quality and reputation of apprentice education. After the amendment made in Vocational Education Law No. 3308, the wages of journeymen were increased, and the government undertook the wages of all students in these programs. Opportunities for becoming a master instructor have been extended, and the diversity of companies where students can receive on-the-job training has been enriched.

The IMEP project, launched in 2020, aimed to increase the access of immigrant students to apprenticeship training. Within the scope of the project, the infrastructures of VTCs located in regions where immigrant students are concentrated were improved, and information campaigns were carried out. In addition, additional Turkish lessons have been added to improve the Turkish language skills of immigrant students.

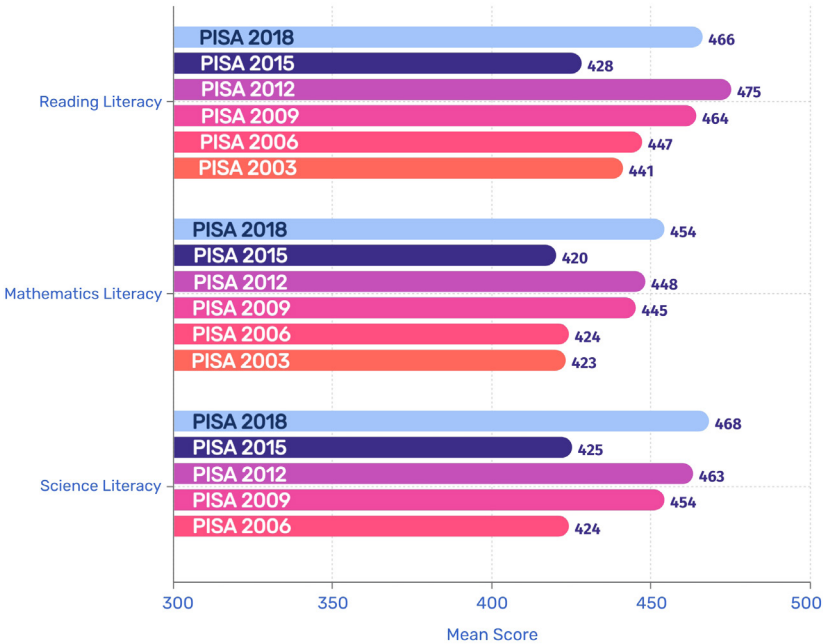
THE PERFORMANCE OF THE TURKISH EDUCATION SYSTEM IN INTERNATIONAL LARGE-SCALE ASSESSMENTS

Overall, student performance in core disciplines is a key indicator of the success of education systems. Mainly, academic achievement is widely used as a performance indicator representing the level of students acquiring expected outcomes. The performance of education systems is monitored through national and international large-scale assessments (IES, 2015; Özer, 2020; Polat, 2014). In these studies, a representative sample is used to make data-based inferences about the target group as a whole (Martin et al., 2020; OECD, 2019). The design of the studies allow comparisons between the findings of earlier cycles (Martin et al., 2020; OECD, 2019). This feature enables researchers to evaluate the change in the performance of countries and economies over time-based. This section evaluates Türkiye's overall performance based on the findings of the PISA and TIMSS assessments.

Program for International Student Assessment (PISA) Results

The Program for International Student Assessment (PISA) is implemented by the Organization for Economic Development and Cooperation (OECD). PISA is a highly respected large-scale assessment applied in three-year cycles (MoNE, 2019; OECD, 2019), focusing on students' reading, mathematics, and science literacy, and assesses students' ability to use their skills in daily life conditions (OECD, 2019). Türkiye's overall scores in the PISA cycles since 2003 are given in Figure 30.

Figure 30. The Mean Score of Türkiye in Diverse Cycles of PISA

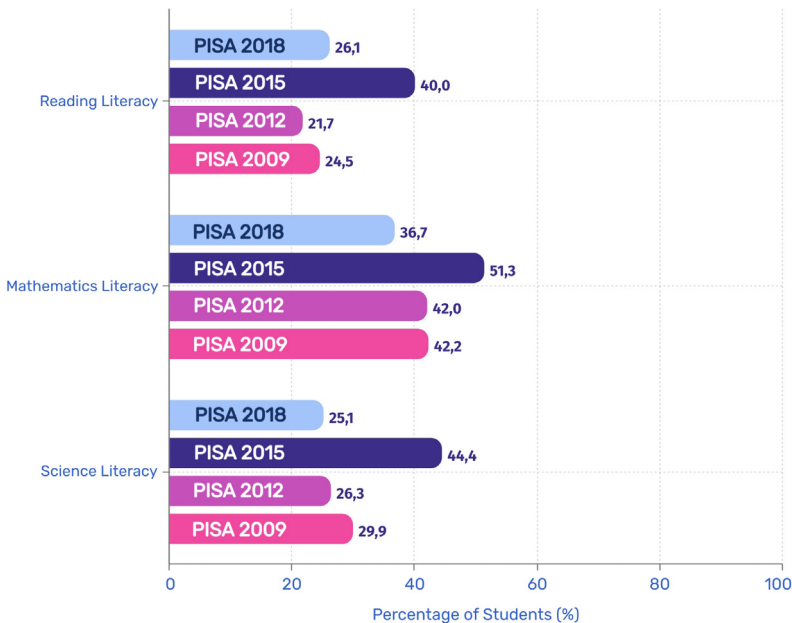


As seen in Figure 30, Türkiye’s PISA performance shows a general increasing trend in each literacy area. In PISA 2018, Türkiye reached the highest overall score in mathematics and science literacy and approached the maximum overall score (from the PISA 2012 cycle) in reading literacy. In addition, Türkiye became the country with the highest increase in overall scores between the 2015 and 2018 cycles in mathematics and science. In this context, Türkiye’s overall score performance has maintained an upward trend since 2003. The only exception was in the 2015 cycle, whose significant and sudden decrease in overall scores has been described as an “anomaly” by the

OECD (OECD, 2019). The PISA also evaluates the distribution of students at proficiency levels as an aspect of national educational performance. Six proficiency levels are defined in the three PISA literacy, with the second level set as the grade that all students must reach for sustainable development (OECD, 2019).

Figure 31 shows the percentage of students in Türkiye who did not reach the second proficiency level in the last four PISA cycles.

Figure 31. Percentage of Turkish Students below Low Proficiency Level (Second PL) in Diverse PISA Cycles



As seen in Figure 31, the rate of students who scored below the second proficiency level shows significant differences between PISA cycles. The rate dropped to its lowest level in mathematics

and science literacy in the 2018 cycle and remained slightly higher in reading literacy compared to the 2009 and 2012 cycles. In summary, given Türkiye’s increasing PISA performance across recent cycles, the rate of students scoring below the second level of proficiency, especially in mathematics and science literacy, has decreased significantly.

Despite the general increase in Türkiye’s performance over these four PISA cycles, Turkish students’ overall scores have not yet reached the OECD average (OECD, 2019). Achieving the highest mathematics and science literacy score during the 2018 cycle represents an important step towards approaching the OECD average (MoNE, 2019). Maintaining the recent educational investments and improvements in access to education is critical for reaching this goal. Finally, the PISA findings on the overall achievement differences between schools in Türkiye (between-schools variation) are given in Figure 32.

Figure 32. Between-School Variance in Diverse PISA Cycles

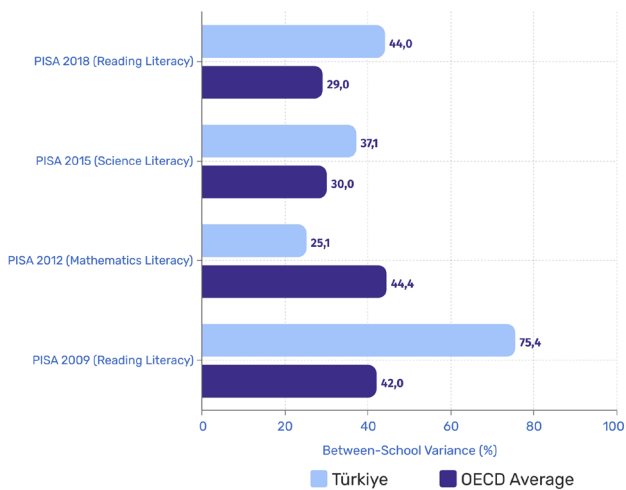


Figure 32 indicates that the between-schools variance, which is an indicator of the achievement gap between schools in Türkiye, was above the OECD country average in all the last four PISA cycles. Considering that both the 2009 and 2018 cycles focused on reading literacy, the achievement gap between schools has partially decreased over time; however, the gap is still an area of development in Türkiye, requiring additional policy intervention.

Trends in Mathematics and Science Study (TIMSS) Results

The Trends in International Mathematics and Science Study (TIMSS) is a large-scale assessment focusing on student achievement in the 4th and 8th grades (Mullis et al., 2020). The TIMSS is developed and implemented by the International Association for the Evaluation of Educational Achievement (IEA) over four-year periods. Türkiye has been a long-time participant in the TIMSS since 1999 (MoNE, 2020). Compared to PISA, TIMSS is developed with a more curriculum-oriented approach and designed to measure “academic achievement” rather than literacy (Mullis et al., 2020). Similar to PISA, TIMSS reveals both the average scores and students’ distribution in proficiency levels. Figure 33 shows the change in Türkiye’s average score during the TIMSS cycles of the last 20 years.

Figure 33. Mean Scores of Türkiye in Diverse Cycles of TIMSS

a. 4. Grade

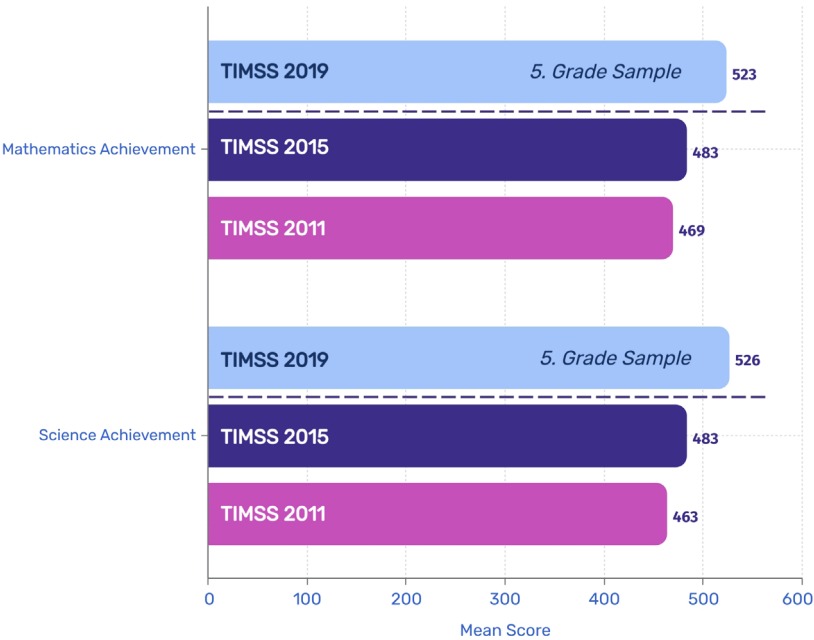
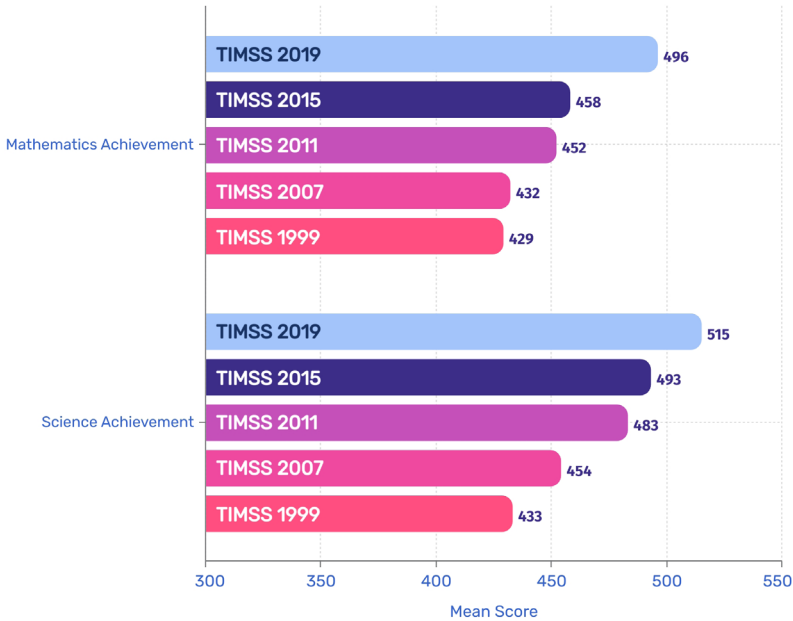


Figure 33. Mean Scores of Türkiye in Diverse Cycles of TIMSS

b. 8. Grade



As seen in Figure 33, Türkiye's average score in the TIMSS cycles shows a continuous upward trend across both grade levels and domains, which peaked in the 2019 cycle. In 2019, the scale center (average scale score of 500) was exceeded for the first time in both domains at the 4th-grade level and in mathematics at the 8th-grade level. Therefore, Türkiye's performance in TIMSS has increased continuously at both grade levels.

Figure 34 shows the rates of students who scored below the lower proficiency level in the last three TIMSS cycles.

As seen in Figure 34, the rate of students who scored below the lower proficiency level has decreased continuously in the last three TIMSS cycles and dropped to its lowest level in the 2019 cycle. In other words, the percentage of students who could not reach the minimum proficiency criteria for achieving sustainable development goals decreased gradually.

Figure 34. Percentage of Turkish Students below Low Proficiency Level in Diverse TIMSS Cycles

a. 4. Grade

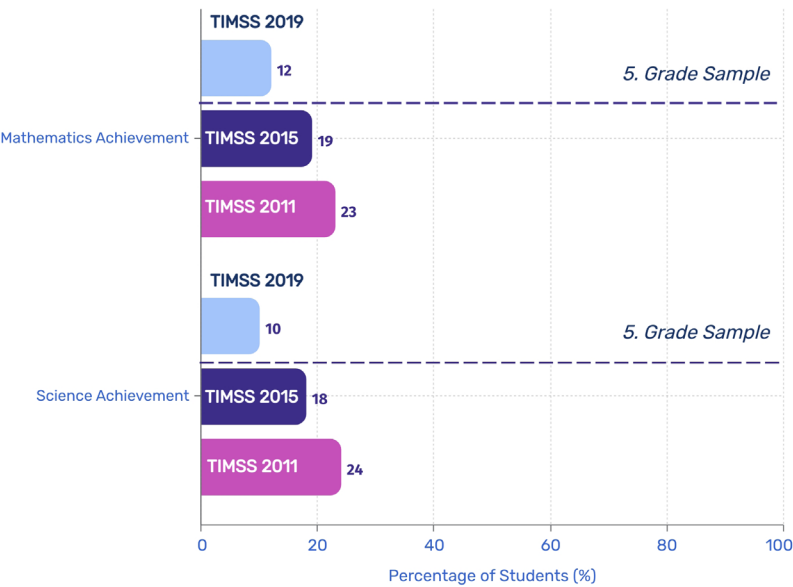


Figure 34. Percentage of Turkish Students below Low Proficiency Level in Diverse TIMSS Cycles

b. 8. Grade



In addition, the number of students with advanced proficiency increased significantly as seen in Figure 35. At the 4th grade level, the percentage of students in the advanced level increased from 5% or less in the 2011 and 2015 cycles to over 10% in the 2019 cycle. Similar increases were observed at the 8th grade level, with the rates ranging from below 10% in the previous cycles to 12% in mathematics and 13% in science in the 2019 cycle. Thus, Türkiye's overall performance increase led to a transition of students to higher proficiency groups.

Figure 35. Percentage of Turkish Students Reaching Advanced Proficiency Level in Diverse TIMSS Cycles

a. 4. Grade

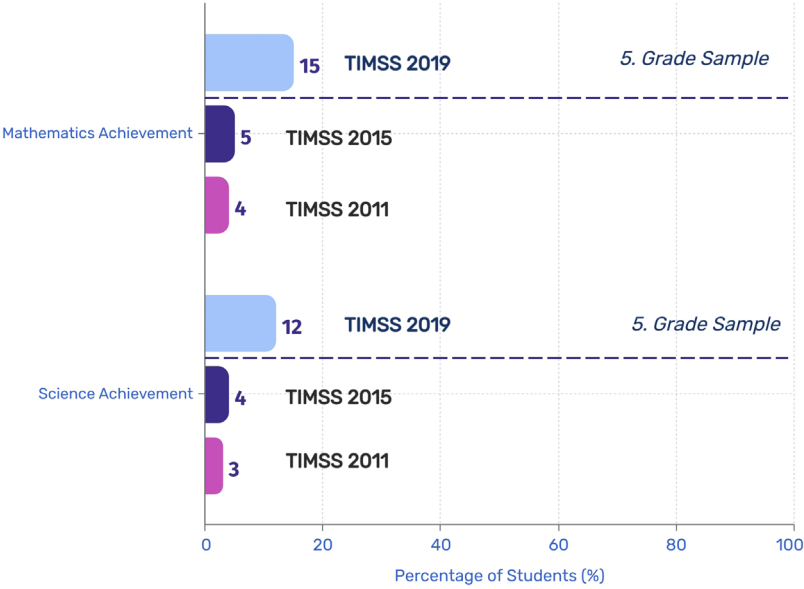


Figure 35. Percentage of Turkish Students Reaching Advanced Proficiency Level in Diverse TIMSS Cycles

b. 8. Grade

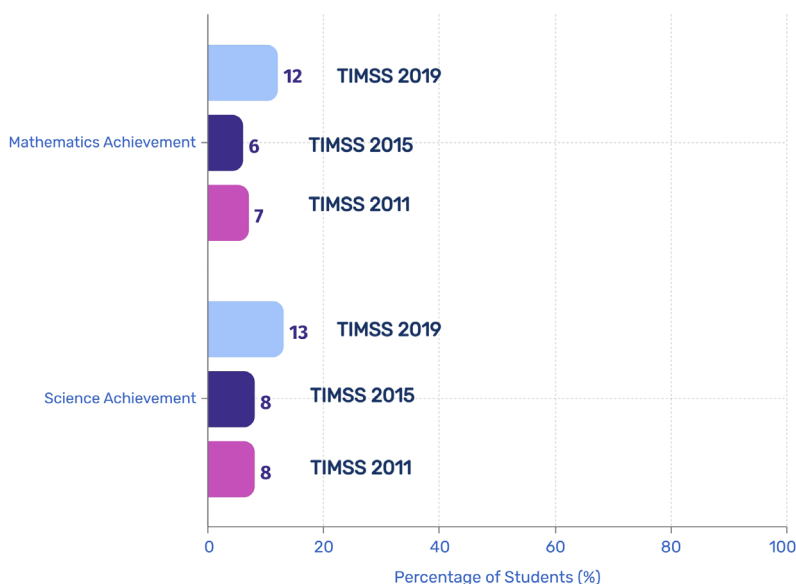


Figure 36 shows TIMSS results on the achievement gap between schools from different socioeconomic levels.

As seen in Figure 36, the gap between the average scores of students attending schools from different socioeconomic backgrounds in Türkiye is above the international average at both the 4th and 8th grade levels. The achievement gap in Türkiye is also significantly higher than the international average at the 4th-grade level. This reveals the importance of support for schools where socioeconomically disadvantaged students are concentrated, despite significant increases in TIMSS performance in Türkiye.

Figure 36. Achievement Gap between Schools from Diverse Socioeconomic Status - TIMSS 2019 Mathematics

a. 4. Grade

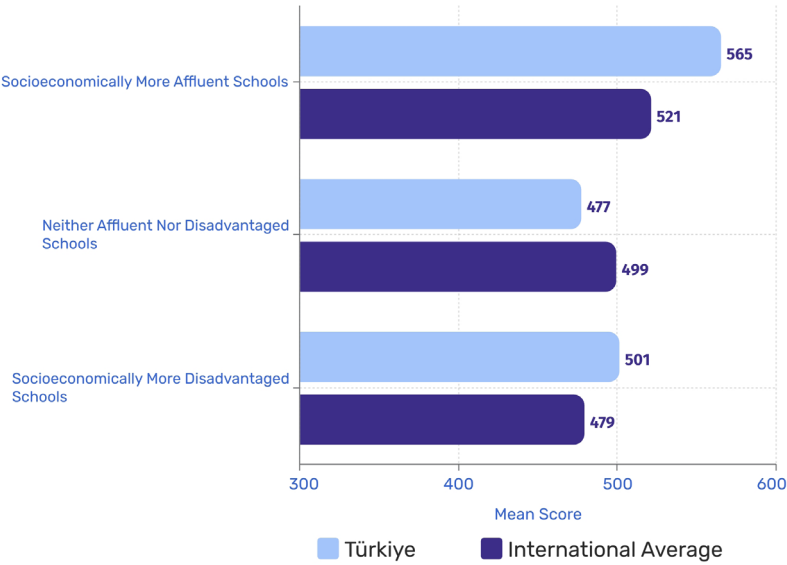
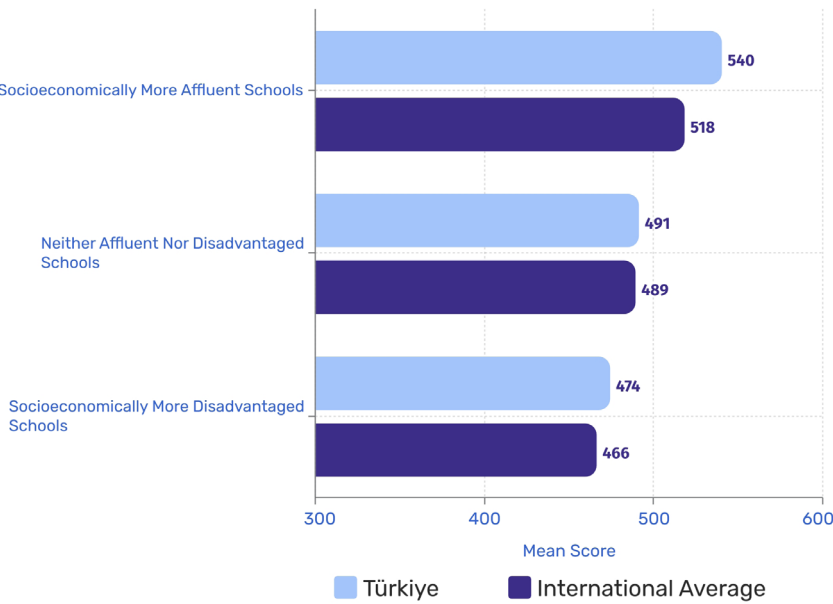


Figure 36. Achievement Gap between Schools from Diverse Socioeconomic Status - TIMSS 2019 Mathematics

b. 8. Grade



SOCIAL POLICIES IN THE TURKISH EDUCATION SYSTEM

As explained in the first chapter, access to education has greatly increased thanks to concrete steps to universalise education in Türkiye over the last 20 years. While the inclusiveness of the education system increased, indicators of the quality of education improved concurrently. In this context, the universalization of education in Türkiye and the quality improvement of the education system coincided. Strengthening the education system in both aspects over the previous two decades has led this era to be labeled as a “transformation period.” Education and social support programs to increase inclusion played a vital role in this transformation, along with increased schooling rates, the number of teachers, schools, classrooms, and other structural improvements. With these programs, students and families with various socioeconomic disadvantages were prioritized, educational opportunities for students were diversified, and steps were taken to increase equality of opportunity. Therefore, the following programs were designed to spread and amplify the improvements described in the first chapter. To address the last 20 years of transformation in education experienced holistically, this section details both longstanding and newly developed social support policies that have been implemented in cooperation with the MoNE and its stakeholders.

HOSTEL CAPACITY AND SCHOLARSHIPS

Schools with hostels provide students with the opportunity to receive education outside their residential area, thus playing an important role in ensuring equality of education. School hostels support students who are disadvantaged for various reasons or who want to study at a school outside their region of residence.

In this context, students are given different choices and opportunities when hostel accommodations are expanded. In

addition, research has shown that boarding schools significantly bolster the participation of female students in education (MoNE, 2005).

Furthermore, scholarships provide financial support for students from low socioeconomic status and reward academically successful students. In this context, financial support encourages students' participation in education and promotes their advancement to further levels of education. The increasing schooling rates and the number of students over the last 20 years have increased the need for scholarships; consequently, the MoNE has allocated better resources for student financial aid.

Figure 37 indicates the change in hostel capacities and scholarships over the last 20 years.

As seen in Figure 37, hostel capacity increased from 366,769 in 2006 to 536,333 in 2021 (a 46.2% gain). A significant increase in hostel capacity, especially in response to the increase in upper secondary schooling rates, offers important accommodation options to students. Figure 29 also shows a remarkable increase in the number of student scholarships. While the MoNE gave 102,419 students scholarships in 2001, this number reached 320,461 in 2021 (more than tripled in 20 years). This near tripling of the number of scholarships represents a significant increase in the contributions to support socioeconomically disadvantaged students and reward successful students.

Figure 37. Hostel Capacity of MoNE Institutions and Number of Scholarships between 2001 and 2021

a. Hostel Capacity

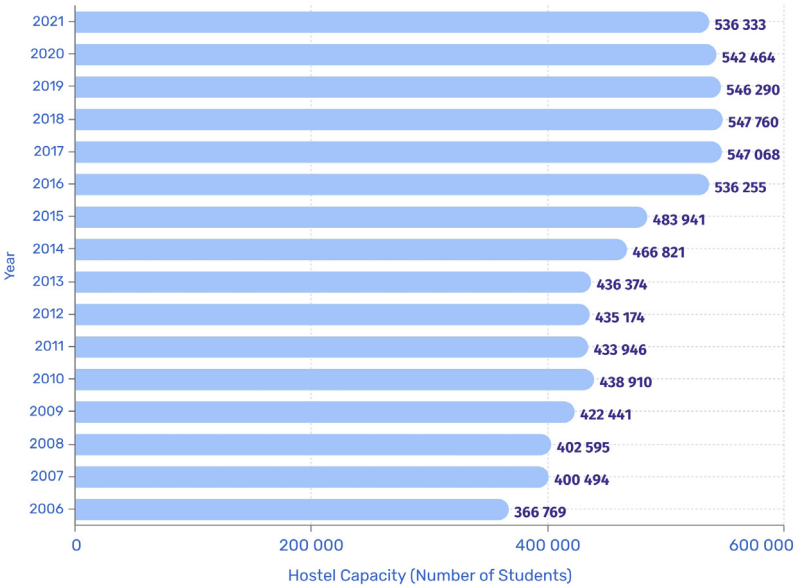
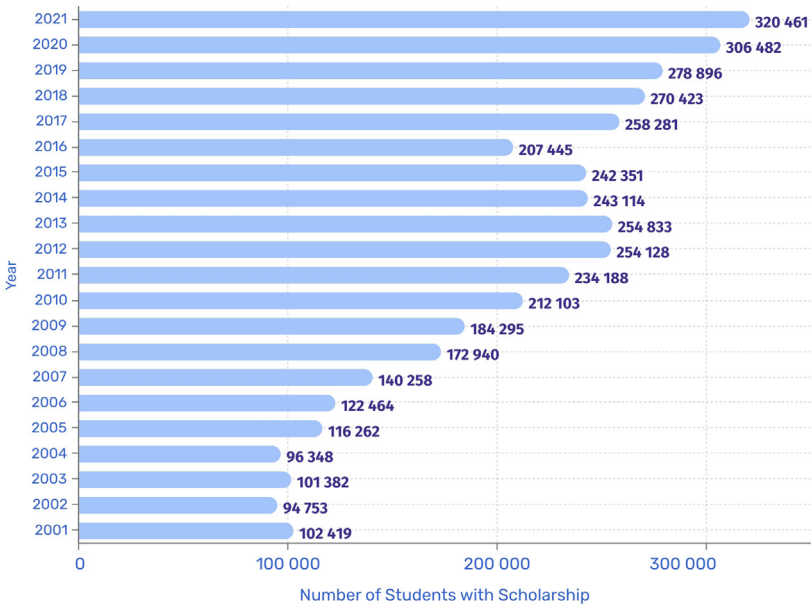


Figure 37. Hostel Capacity of MoNE Institutions and Number of Scholarships between 2001 and 2021

b. Number of Scholarships



REMEDIAL EDUCATION & SUPPORT PROGRAM IN PRIMARY EDUCATION (IYEP)

Today, most education systems define the achievements or skills expected of students at certain grades or educational levels (Barrett, 1996; Vos, 1996). These skills form the basis of learning in advanced classes and levels and play a critical role in the long-term academic performance of students. Therefore, student skill levels are closely monitored, and interventions are developed to remedy potential deficiencies (Gençoğlu, 2019; Schwartz, 2012). In this way, countries frequently assess their students’

performance against possible learning deficiencies to quickly intervene if necessary. Evaluation of students' achievement and skill levels is adopted by national exams and large-scale international assessments such as PISA, TIMSS, and PIRLS (Mullis et al., 2017, 2020; OECD, 2019). Proficiency levels or international benchmarks are defined based on the assessment framework in these studies, and countries are compared based on the rate of students reaching particular proficiency levels (Mullis et al., 2017, 2020; OECD, 2019). The results are categorized according to a framework assessing the sufficiency of the country's human resources to achieve economic sustainability alongside social development goals defined by various international organizations (Mullis et al., 2020; OECD, 2019).

As discussed in the first chapter, the increase in Türkiye's PISA and TIMSS performance reveals significant academic improvements for the education system (MoNE, 2019, 2020; Mullis et al., 2020; OECD, 2019). The decrease in the percentage of students at low proficiency levels majorly contributed to this general increase in performance. In this context, the increase in performance across Türkiye is closely related to the improvement of students at lower proficiency levels, which indicates significant improvements in equality of opportunity in education. Despite these developments, the number of students who cannot reach basic proficiency levels remains comparatively high (MoNE, 2019, 2020; Mullis et al., 2020; OECD, 2019). This finding underlies a need for support programs for students who cannot reach the expected level of proficiency. Since the 1970s, Türkiye has implemented diverse approaches to support students with academic skill deficits (Gençoğlu, 2019). These practices generally provide additional courses to students with failing grades in certain courses at the end of the year or those who could not be included in formal education for various

reasons despite being of school age. These programs, especially the “Complementary Classes and Courses” and the “Supportive Class Program,” made significant contributions to the education of these students (Gençoğlu, 2019). However, the structure and focus of these programs differ from current approaches that support students as they continue their education. Earlier interventions were implemented at the end of the semester; thus, they were late to intervene and ultimately failed to cut off the issue at its source.

Thus, the MoNE needed to develop a new approach that focused on learning deficiencies and mitigated them dynamically within the education process rather than providing support programs based on performance at the end of the term.

The Remedial Education & Support Program in Primary Education (IYEP) was developed to evaluate students’ performance in core learning areas, identify students who could not reach expected competencies, and enable them to acquire core skills (Gençoğlu, 2019; TEDMEM, 2019). IYEP, implemented for the first time during the 2018–2019 academic year, aims to identify the essential skill deficiencies of 3rd and 4th grade students in Turkish language and mathematics and improve their competencies. Within the scope of IYEP, these expected competencies were determined, and the 3rd and 4th grade students performing below the standard began receiving training within the scope of the project (Gençoğlu, 2019; TEDMEM, 2019). Teachers play an active role in identifying students who need the supportive education offered within the scope of IYEP. The Student Identification Tool (PDA) developed by the MoNE is applied by classroom teachers to identify students who cannot meet the Turkish and mathematics standards for the 3rd and 4th-grade levels. Therefore, students’ core competencies in Turkish and mathematics are evaluated through open-ended questions

(assessed with rubrics) at the beginning of the education period (usually in October).

Students who cannot reach the specified competencies in the fields of mathematics and Turkish have three options (MoNE, 2018): they can receive education only in mathematics, only in Turkish, or in both areas, depending on their learning deficiencies. Additionally, students are provided with psychosocial support alongside their academic skill training. Thus, students' self-efficacy, attitudes towards lessons, and learning are strengthened simultaneously. This additional education takes place on weekends or weekdays outside class hours. In addition, schools have been given the authority to plan the education process according to their unique physical infrastructure and the availability of their education staff. Therefore, school administrations can structure IYEP courses in a way that corresponds with the formal education process of the school and the needs of students and staff.

Within the scope of the program, students can be given a maximum of 10 lesson hours per week. After the completion of the program, the Student Assessment Tool (KBA), which consists of open-ended questions measuring the aforementioned educational outcomes, is applied (Gençoğlu, 2019; MoNE, 2018). Decisions on students' progress are determined based on the scores of KBA. Approximately 88% of the students who have participated in the IYEP program since its implementation in the 2018–2019 academic year have been successful in mathematics, while 79% have demonstrated satisfactory performance in the Turkish language (TEDMEM, 2019). In this context, the IYEP contributed significantly to supporting students with learning deficiencies. Additionally, student and parent feedback showed this approach to be efficient and effective.

VOCATIONAL HIGH SCHOOL STUDENTS MEET WITH FAMILIES PROJECT

Product and service production is prioritized in VET, which supports students' vocational skills in Türkiye through a practice-based education process. In this context, VET institutions have a vital production capacity that must match the needs of society. Consequently, identifying these needs to strengthen the relationship between the VET system and society is critical. The "Vocational High School Students Meet with Families Project" was launched in 2017 to strengthen the relations between VET students and their communities, as well as to use VET students' skills during their education to meet the needs of society. Thus, the project aimed for VET high school students in all 81 provinces to meet the needs of the people in their areas, starting with the regions closest to their schools.

When students develop skills in diverse fields—including shoe production, appliance and furniture repair, paint and whitewashing, and elderly care—they can meet society's diverse needs. This project shows that VET education is not solely limited to learning in individual schools and production areas but rather enables students to gain skills that can be used to meet the daily needs of society. Therefore, the project helps to integrate education into society by capitalizing on students' vocational skills. Since its implementation in 2017, total participation in the project has grown remarkably. Table 1 shows the number of students and teachers participating in the project between 2017–2018 and 2021–2022, along with the number of people in need reached by those participants.

As seen in Table 1, both the participation of students and teachers in the project is quite high. Even during the COVID-19 pandemic in 2019–2020 and 2020–2021, the project continued through face-to-face education in schools. However, the number of participants was limited due to pandemic restrictions.

Table 1. Participation in Vocational High School Students Meet with Families Project

Academic Year	Number Of Students	Number Of Teachers	Number Of Houses With Need	Number Of People With Need
2017-2018	61,318	18,372	20,285	68,755
2018-2019	39,197	13,217	13,790	53,886
2019-2020	22,698	8,547	9,955	41,081
2020-2021	13,423	6,926	10,442	34,792
2021-2022	165,767	74,048	151,321	380,716
TOTAL	302,403	121,110	205,793	579,230

To date, 302,403 students and 121,110 teachers have participated in the project, and 579,230 people in need have benefited from the support. It is also worth noting that participation in the project is maximized in the 2021-2022 academic year. With the increased capacity of VET institutions and extended coverage of the project, the participation of students and teachers increased almost tenfold compared to the previous year.

SUPPORT AND TRAINING COURSES (DYK)

Enhancing educational opportunities and developing support mechanisms for students in need is important for increasing both educational performance and equality (OECD, 2012; Özer et al., 2020). In this context, enhancing educational opportunities and ensuring student access are critical steps for creating a fairer education system.

The MoNE has implemented Support and Training Courses (DYK) for many years to increase the variety of teaching options, enable learners to take courses in other schools and provide additional support to students. Within the scope of the project,

DYK courses are structured as an academic support program outside of formal education time (generally on weekends) that students can attend free of charge. Students have a free selection of courses and schools based on availability. Consequently, DYK courses offer a focal opportunity as an officially licensed, flexible, and free program for all students in the Turkish education system.

DYK courses also provide academic support to students, who can retake the same courses (repeat courses taken during the regular academic year) or select additional courses through the program. This opportunity is critical for addressing students’ need for extracurricular resources and mitigating the impact of the opportunity gap between students.

DYKs spread across the country over a short period to become the main support program in the Turkish education system (Özer et al.,2020). The scope of the DYK courses, which prioritize 8th and 12th grade students preparing for transition between lower and upper secondary education, has expanded over time. Students in grades 6-8 and 10-12 can participate in DYK courses as of the 2021-2022 academic year. Therefore, the coverage and inclusiveness of the leading academic support program in Türkiye have significantly increased in recent years. Data on attendance in DYK courses and the number of schools offering DYK are provided in Table 2.

Table 2. Participation in Support and Training Courses in the Last Two Years

2020-2021 Academic Year			2021-2022 Academic Year		
8th and 12th Grades			6th, 7th, 8th and 12th Grades		
Number of Students	Number of Teachers	Number of Course Centers	Number of Students	Number of Teachers	Number of Course Centers
994,649	148,706	18,512	2,585,194	216,883	20,581

Table 2 shows the high numbers of students and teachers participating in DYK courses during the last two academic years. While approximately one million students benefited from DYK courses in 2020–2021, this number reached approximately 2.6 million in 2021–2022. The increase in attendance is directly related to the extension of these courses to additional grade levels. In response to the rising number of students nationwide, the number of DYK centers increased from approximately 18,500 to 20,500. Similarly, the number of teachers working in DYKs increased from approximately 150,000 to over 215,000. Consequently, the statistics in Table 2 indicate the high demand from students for DYK courses and the significant increase in resources allocated by the MoNE to meet this demand.

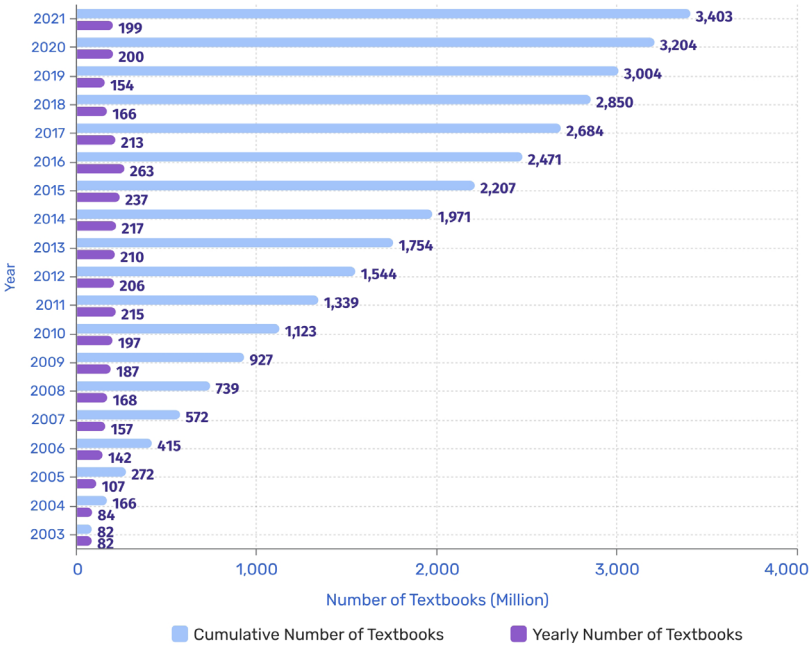
Given DYK's emergence as an important support mechanism in the education system, the MoNE initiated a large-scale assessment of the effectiveness of the program in 2020–2021. In this context, specific assessment tools were developed for DYK courses, which were applied before and immediately after the completion of the program. The findings have been used as feedback to improve the effectiveness of DYK courses at the provincial level.

FREE PRINTING AND DISTRIBUTION OF TEXTBOOKS

Textbooks, as the most foundational education material, play an important role in skill acquisition and classroom teaching (Behnke, 2018; Özer et al., 2020). In this context, initiatives ensuring that all students have full access to textbooks and can effectively use these resources significantly contribute to increasing equality of opportunity in education.

In 2003, MoNE began printing all textbooks free of charge and delivered them to students. Within the scope of this initiative,

Figure 38. Number of Textbooks which Printed and Distributed to Students by MoNE between 2003 and 2021



As seen in Figure 38, the number of textbooks printed and delivered to students by the MoNE years varies between 82 million and 263 million annually. Therefore, the total number of books published and distributed from 2003 to 2021 has exceeded 3.4 billion. When considering the total number of books distributed in the last 19 years, the MoNE has printed and delivered an average of 179.1 million books to students each year.

CONDITIONAL EDUCATION SUPPORT (ŞEY)

The socio-economic disadvantages of families can create negative effects on students’ educational outcomes. Studies show that

parents with lower levels of education also demonstrate lower involvement in their children's education (Zhang et al., 2021) and provide lower levels of support to their children (Li et al., 2020). In addition, students from these families are more likely to experience school dropout and disciplinary problems (Hosokawa & Katsura, 2018). The disadvantage of lower socioeconomic status is particularly evident in schooling (Paterson, 2009), as students from less affluent backgrounds are more likely not to be enrolled in education despite being at school age or leave immediately after the compulsory education period. Therefore, socioeconomic disadvantages significantly risk students' educational experiences and outcomes.

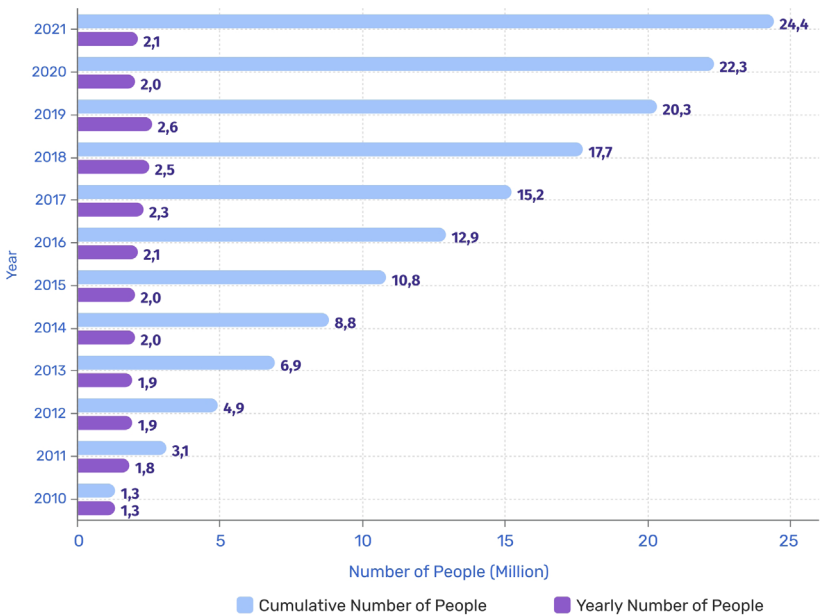
Countries use various methods to cope with the adverse outcomes of socioeconomic disadvantage, including conditional support (Esenyel, 2009; Özer et al., 2020). Conditional Education Support (ŞEY) in Türkiye refers to the financial support provided to disadvantaged families on the condition that they ensure their children's regular participation in formal education. For families to receive support under ŞEY, their children cannot be absent from school for more than four days each month. Therefore, ŞEY contributes to school enrollment and participation of disadvantaged students and financial support for their families.

Socioeconomic disadvantage is a social phenomenon that can be transferred between generations (Bourdieu, 1986). Therefore, the socioeconomic disadvantage experienced in one generation may lead to various disadvantages in future generations. However, education and other support mechanisms play a key role in preventing the transmission of this disadvantage between generations. These social and financial mechanisms prevent students from experiencing social difficulties due to factors beyond their control. Providing financial assistance reduces the

vulnerabilities of these groups and strengthens their integration into society through education.

The ŞEY program in Türkiye has been implemented since 2003 in cooperation with UNICEF, MoNE, the Ministry of Family, Labor, and Social Services, and the Turkish Red Crescent. Payments are made within the scope of ŞEY under the Conditional Cash Transfer (CCT) program in accordance with Law No. 2022. In the last ten years, more than 24 million people (approximately 2 million people per year) were supported financially within the scope of ŞEY, as shown in Figure 39.

Figure 39. Number of People Supported with Conditional Education Support between 2010 and 2021



NEW ORIENTATIONS IN THE TURKISH EDUCATION SYSTEM

PRESCHOOL EDUCATION CAMPAIGN

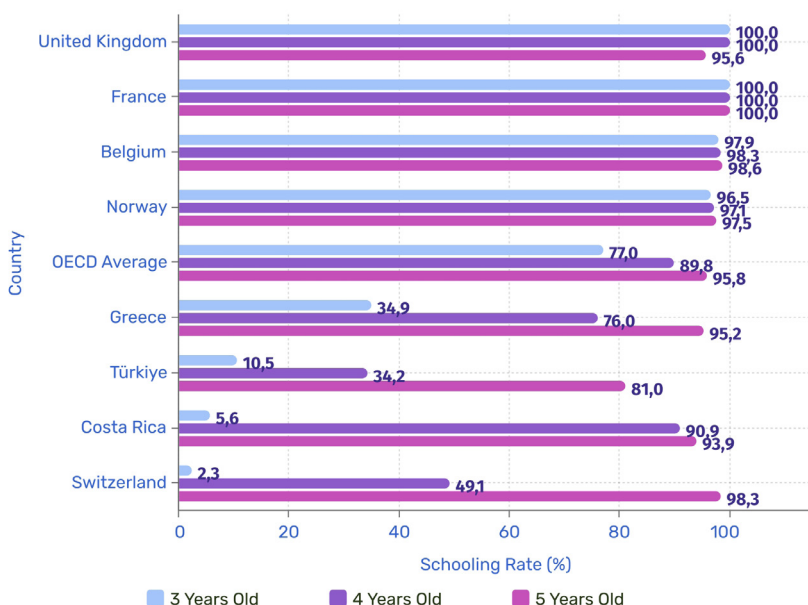
Early childhood is when children's cognitive development and learning capacity peaked (Cusick & Georgieff, 2013). This period is considered a "sensitive" interval for high brain responsiveness to the environment and stimulus (Fox et al., 2010). Therefore, the learning opportunities in this period can potentially increase children's cognitive capacities. Consequently, the environments and resources offered in this period are vital for their skill development (Ancheita, 2005).

Preschool education significantly contributes to children's cognitive and social-emotional (Australian Institute of Health and Welfare, 2015; McCoy et al., 2017; Suna & Özer, 2022). Through this education period, students can acquire self-care skills, improve their pre-academic skills, and easily access educational materials. As a result, students participating in preschool education have higher short and long-term academic achievement (Australian Institute of Health and Welfare, 2015; McCoy et al., 2017; Suna & Özer, 2022). Similarly, students participating in preschool education show social-emotional skills more frequently (Gormley et al., 2011).

The multiple benefits of preschool education are also crucial for a more equitable education system. The universalization of early childhood education implies supporting all students in terms of cognitive and social skills (OECD, 2012). It is critical for disadvantaged students to start school prepared by supporting their academic and social skills development (Leseman, 2002). It is acknowledged that disadvantaged students need more support and encouragement throughout their education life compared to their peers (OECD, 2012). Otherwise, these students are more likely to show negative behaviors such as low achievement, drop-out and continuous absenteeism (OECD, 2012). Preschool education has the potential to minimize these negative probabilities and support disadvantaged students.

Preschool education has been among the main investment areas of education systems due to its personal and systemic benefits (Lynch & Vaghul, 2015). Studies reveal that investments in early childhood are the ones with the highest benefit (Heckman et al., 2010). The studies show that each \$1 investment in preschool education creates value ranging from \$7 to \$12 in the long term (Heckman et al., 2010). Therefore, important projects are implemented to universalise preschool education in many countries. Figure 40 shows enrollment rates for ages 3-5 in different countries in 2020 (OECD, 2022).

Figure 40. 3-5 Year-Old Schooling Rates of Preschool Education in OECD Countries in 2020*



As can be seen in Figure 40, the rates of access to preschool education vary considerably between countries in different age groups. In 2020, France, England, Belgium and Norway ensured universalization in preschool education from the age of 3, while Switzerland, Costa Rica, Mexico, Greece and Türkiye were among the countries with relatively low schooling rates. As of 2020, the OECD average was calculated as 77% at age 3, 94.8% at age 4, and 95.8% at age 5 (OECD, 2022).

As of late 2021, MoNE has launched a significant campaign to expand preschool education in Türkiye. This campaign aims to realize the target of a “minimum one year of preschool education for every student”, which has been included in the education policy documents in Türkiye for many years. The goal of disseminating preschool education is also among the sustainability goals of international organizations such as the United Nations (Merida-Serrano et al., 2020). In this context, the dissemination of preschool education significantly contributes to Türkiye’s achievement of a central target in both the national and international agenda. MoNE set a target to increase the schooling rate from 9% to 50% at age 3, from 16% to 70% at age 4, and from 65% to 100% at age 5. Thus, MoNE plans to increase the schooling rate in the 3 to 5 age group to the OECD average. In this context, MoNE carries out diverse approaches for disseminating preschool education in Türkiye. These approaches within the scope of the Preschool Education Campaign were briefly explained in this subsection.

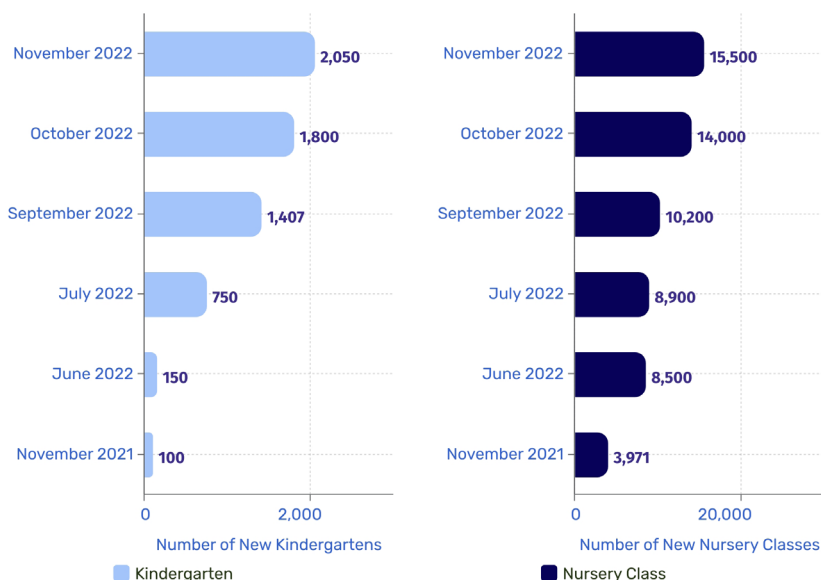
Establishing New Kindergartens and Nursery Classes

The first step within this campaign’s initiative is to provide the necessary infrastructure and capacity to increase access to preschool education. In this context, the institutional capacities needed for the target population have been determined at the provincial level throughout Türkiye. These plans aim to build

this capacity for all students to attend preschool education at public institutions. Consequently, MoNE planned to construct 3 thousand kindergartens or 40 thousand nursery classes to reach the expected schooling rates.

Therefore MoNE focused on establishing new kindergartens and nursery classes within a short period of one year. Figure 41 shows the number of newly established kindergartens and nursery classes in the last year.

Figure 41. Recently Established Kindergartens & Nursery Classes in Türkiye in Last One Year



As seen in Figure 41, the number of newly built kindergartens and nursery classes has increased continuously through 2022. As of November 2022, MoNE has approached the number of kindergartens and nursery classes to achieve the schooling

targets. The establishment of more than 2 thousand kindergartens and more than 15 thousand nursery classes in one year clearly indicates the dedication of MoNE's aim to expand early childhood education. These efforts led to great increase in schooling rates in just one year; 3-years old schooling increased to 14% from 9%; 4 years rose 35% from 16%, and 5-years old schooling advanced to 97% from 65%.

Increasing Participation in Early Childhood Education in Low-Populated Regions

Another step taken by MoNE to expand preschool education is the conversion of empty buildings into early childhood institutions. In this context, priority has been given to identifying empty and inactive buildings and transforming them into independent kindergartens or nursery classes. This step significantly increases enrollment in low-population areas, as urbanized areas are primarily located in areas with reduced populations.

In order to increase the participation of students in preschool education in low-populated regions, establishing primary schools in these regions is encouraged. With a new regulation by MoNE in 2022, a primary school is allowed to be established, regardless of the number of students in this region. Additionally, nursery classes are prioritized to open in these primary schools. This regulation provides significant outputs for an increase in early childhood education in these regions. After the new regulation and conversion of empty buildings in early childhood institutions, approximately 2,000 kindergarten classes were opened, and more than 20 thousand students had access to preschool education.

Establishment of Preschool Education Institutions in Organized Industrial Zones

Organized Industrial Zones (OIZs) are areas where different

labour market actors collaborate for maximized productivity. OIZs, whose number has increased from 192 to 341 in the last 20 years, have significant potential for national economic development. Therefore, OIZs constitute areas where the number of employees is constantly increasing, and the human capital is substantial.

MoNE carries out various projects to use the potential of OIZs within education effectively. At the beginning of 2022, MoNE opened vocational training centers (VTCs) in all OIZs and ensured that the labor potential of OIZs was associated with VET. In this context, students can receive training from experts in OIZs and perform on-the-job training in companies in OIZs. Therefore, the resources provided by OIZs are used to develop the practical skills of VET students.

With a new decision in 2022, preschool education institutions were started in all OIZs. Thus, the children of employees who concentrate in these areas are given the opportunity to benefit from preschool education. This step ensures that the children of employees working in OIZs receive education from institutions in the same field. While this situation enables the children of families working in OIZs to benefit from preschool education, it also has the potential to increase women's employment.

Financial Support to Encourage Access to Preschool Education

As mentioned earlier, preschool education provides many long-term benefits to students, and these opportunities are particularly significant for disadvantaged students. In this context, it is vital for all students, regardless of their social background, to benefit from preschool education in terms of equal educational opportunities (OECD, 2020). However, studies show that participation in preschool education in Türkiye is associated with socioeconomic status (Suna & Özer, 2022). In other words,

the children of families from higher socioeconomic status benefit more from the advantages of preschool education, increasing the achievement gaps. Therefore, ensuring equality of opportunity in access to preschool education was determined as the main target of MoNE.

Education costs are considered one of the main barriers to accessing preschool education (OECD, 2020). MoNE has developed a new financial support package to enable disadvantaged students to benefit from pre-school education. In the financial support program, for which an annual budget of 500 million TL, the government covers the expenses of preschool education of disadvantaged students. This program has great potential to encourage the most disadvantaged groups in preschool education.

1,000 SCHOOLS PROJECT IN VOCATIONAL EDUCATION AND TRAINING

The coefficient application, which began in 1999 and was conducted for more than ten years, transformed vocational education and training (VET) in Türkiye into an education track for unsuccessful and disadvantaged students (Özer, 2020; Suna & Özer, 2021). However, this transformation sometimes increased the disadvantages of students choosing the VET track. When these students were not adequately supported, their disadvantages gradually amplified, causing them to lose motivation to reach the expected outcomes (Özer, 2020). The coefficient regulation not only created a quality problem in the VET system, but also hindered the access of socioeconomically disadvantaged groups to postsecondary education in the long run. Studies have shown that VET students in Türkiye are more socioeconomically disadvantaged than students in other school types (Suna & Özer, 2021). Considering the significant relationship between academic

achievement indicators and SES, this disadvantage decreases the probability of students' future success.

School tracking applied in the transition to secondary education also exacerbates these inequalities for disadvantaged students in VET (Suna et al., 2020, 2020). The disadvantages of VET, together with the practice of school tracking, are clearly seen in the results of national and international large-scale assessments. For instance, VET high schools have been among the lowest-performing school types since Türkiye first began participating in the PISA (MoNE, 2019, 2020).

The relatively low achievement of VET institutions is also seen in the transition period to tertiary education in Türkiye. VET students perform significantly lower on tertiary education entrance exams than their peers from other school types (ÖSYM, 2018). The results show that the socioeconomic disadvantage of VET students affects both their school achievement and performance in the transition to tertiary education. The socio-economic disadvantage of VET students causes diverse repercussions beyond academic performance. In these institutions, negative behaviors such as grade repetition, school dropout, and disciplinary problems occur more frequently than in other educational institutions. Therefore, it is critical to support students both academically and socially. In 2020, MoNE implemented the "1,000 Schools in Vocational Education and Training" project to promote holistic improvements in VET institutions (Özer, 2021).

Considering the complexity of the disadvantages faced by VET students, their support has also been structured with a multidimensional approach. Within the scope of the project, MoNE has aimed to support all stakeholders of these educational institutions, including students, parents, teachers and school administrators. Therefore, the project seeks to improve the

educational processes in these institutions by supporting all stakeholders (Özer, 2021).

Educational and social factors were considered in selecting VET high schools for this project, including low achievement, high rates of absenteeism and disciplinary issues, physical characteristics of the school environment and lack of infrastructure, and the education level of students' parents. The select VET high schools facing the most significant disadvantages according to these factors were identified across all 81 provinces of Türkiye before receiving holistic support. Approximately 600,000 students receive education in the 1,000 schools included in the project, clearly demonstrating the project's large scale.

The initial improvements to the schools aimed to improve their physical environment and infrastructure. The equipment in the workshops of the schools was improved, and laboratories were established in schools that did not have a physics-chemistry-biology (FCB) laboratory. All schools in the project were also equipped with a library. The improvements resulted in 692 schools being maintained and repaired, at least one new library was established in all 1,000 schools, and material support was provided to 1,669 total libraries.

Another step taken for students within the project's scope involved establishing support and remedial education programs to compensate for their skill deficiencies. VET students' socio-economic disadvantages can also compound their probability of poor performance in core skill areas. The General Directorate of Measurement, Evaluation, and Examination Services (ÖDSHGM) identified the core skill deficiencies of the students using measurement tools prepared for the project in order to implement targeted academic support programs that ultimately reached 62,283 VET students.

Since teacher characteristics are the most influential factor in student achievement, in-service training opportunities were enriched for teachers in the 1,000 VET schools. Within the scope of the project, 280,058 teachers participated in trainings on personal development, leadership, and project management. Measurement and evaluation trainings were given to approximately 96,077 teachers and administrators.

To continue the R&D period initiated in VET in recent years and increase innovative work in this area, intellectual property rights (IPR) training was given to 40,166 BILSEM (Science and Art Centers) teachers. Training on students' physical and mental health within the project's scope was also provided. First aid awareness training was given to 45,037 teachers and 81,323 students, and 320,708 students received substance addiction training. In addition, 157 counselors completed "Türkiye Fights against Addiction" trainings. In short, this training process increased teachers' academic skills and physical and mental health knowledge.

Another variable that affects school educational processes is the leadership skills of school administrators. Leadership skills can prompt significant improvement, especially in schools with a sizeable disadvantaged student population. In this context, 3,445 training programs were organized for 32,984 school administrators to improve their managerial leadership skills

Necessary steps have also been taken to improve the social and cultural skills of students in schools within the scope of the project. To accomplish this, the 1,000 VET high schools involved in the project were connected with nearby Anatolian fine arts high schools. Through this bridge, the Anatolian fine arts students connected with the VET students and supported their development in art performance. In addition, students and

teachers in the Anatolian fine arts schools provided training in their respective artistic fields to the VET high school students. Painting and music competitions were organized for the students involved in the project, with various awards given to the top three students in each of Türkiye's 81 provinces. In this context, students' social and cultural skills were supported while simultaneously strengthening cooperation between schools.

Another central and innovative dimension of the project is the educational support provided to parents. Many studies conducted in Türkiye show that the education level of parents is directly related to the educational achievement of their children (Dinçer & Uysal Kolaşın, 2009; Sarier, 2016; Suna et al., 2020a, 2020b, 2021). Similarly, parents' interests and educational involvement contribute significantly to their children's achievement. Given this precedent, a new goal was set to increase the education level of the parents of VET students. In line with this goal, parents who had received between a primary and secondary school education level were prioritized for enrollment in additional education. The benefits of advancing to a higher education level were explained by a one-on-one meeting with parents and procedures for enrollment in open secondary and high schools. Accordingly, 11,058 parents were enrolled in open secondary and open high schools. Educational support for parents was not limited to academics; additional opportunities were provided for parents to acquire vocational skills. First, the specific vocational skills parents wanted to acquire were determined before vocational skills courses for these areas were opened through the General Directorate of Lifelong Learning (GDLL). Parents from different provinces of Türkiye attended these vocational skills courses to build their credentials. Thus, opportunities were provided to increase the parents' education level and provide them with additional training and skills.

NO SCHOOL LEFT WITHOUT A LIBRARY PROJECT

Enriching educational environments, especially libraries, positively impact students' academic achievement and attitudes towards education (Lonsdale, 2003; Williams et al., 2001). While libraries are an essential source of information for students, they also encourage students' reading habits and offer an educational environment outside the classroom. In this context, libraries play a critical role in diversifying the opportunities schools offer.

School libraries are also vital for bolstering equality of opportunity in education since the educational opportunities and resources of families vary. Consequently, students may have differing opportunities to access printed and digital resources at home (OECD, 2019). School libraries come to the fore in addressing these inequalities by ensuring that socioeconomically disadvantaged students have free access to printed and digital resources. Therefore, school libraries alleviate socioeconomic gaps among students by ensuring that every student has access to reading resources.

In October 2021, MoNE initiated an important project to ensure that all 57,108 public schools in Türkiye's 81 provinces have libraries. The "No School Left without a Library" project assessed the library needs of schools to establish libraries in all schools that did not already have one in just two months. The planning within the scope of the project considered the physical facilities of the schools to ensure that all schools could house libraries based on their available areas.

After building libraries within all schools, books and printed materials were provided through cooperation between MoNE and the Ministry of Culture and Tourism. The materials provided within the scope of this cooperation ensure the standardization of library resources across Türkiye. In addition, existing written and

digital resources in school libraries were also enriched within the scope of the project. In this respect, the project has contributed to the enrichment and standardization of library resources as well as the creation of library environments in schools. Recent statistics showed that the project increased the number of books in school libraries from approximately 27 million to more than 103 million, as given in Figure 42. MoNE recently exceeded early announced target of 100 million books in school libraries by the end of 2022.

Figure 42. "No School without a Library Project" and Number of Books in School Libraries



ADAPTING CULTURAL PUBLICATIONS TO DIGITAL ENVIRONMENTS

Today, reading is among the core skills students are expected to acquire (Marinelli et al., 2019) since reading forms the basis for numerous academic and social skills (Eroğlu et al., 2020; Zhang et al., 2014). Therefore, students need to develop reading skills to build positive reading habits and encourage achievement in the long term.

To support students' reading skills and facilitate access to cultural resources, MoNE converted all print cultural publications to digital media formats in November 2021. Thus, all cultural publications of MoNE were made available free of charge through the "MoNE Cultural Publications" mobile application, developed for multiple digital platforms. The diverse publications transferred to the digital platform include world literature and classics, Turkish literature and classics, orient-Islamic classics, and publications for children.

DEVELOPING AND DISTRIBUTING EDUCATIONAL SUPPORT RESOURCES

Educational support materials are tools that facilitate and offer students different ways of learning. Providing students with support materials along with foundational course resources such as textbooks equips them with different perspectives for learning and reasoning. This is especially important for addressing individual learning differences since increasing the variety of resources offered provides new learning opportunities to students. However, facilitating students' access to resources is just as important as increasing the variety of educational materials. In this regard, supporting the access of socio-economically disadvantaged students to educational support materials helps alleviate educational inequalities.

Since October 2021, MoNE has taken significant steps to diversify the resources available to students and to ensure that all students have access to these learning opportunities by enriching all support materials published for the last three years and providing them on a single digital platform. All education stakeholders can access the resources collected free of charge on the “MoNE Supplementary Resources” (<https://yardimcikaynaklar.meb.gov.tr>) webpage. Figure 43 shows the educational support materials published by the MoNE in recent years and their number of views.

Figure 43. Number of Views of Educational Support Materials - Developed & Published by MoNE

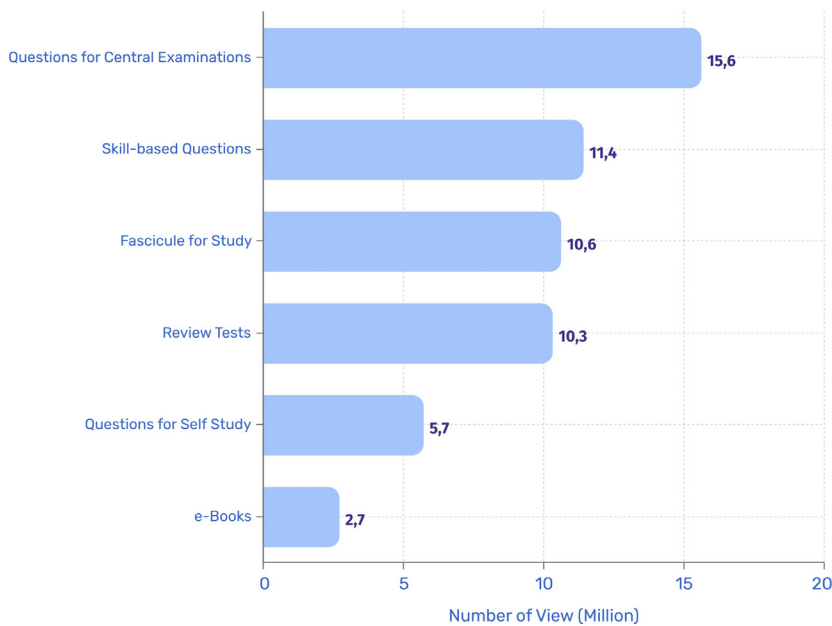


Figure 43 demonstrates that the educational support materials published by MoNE in recent years have reached many stakeholders. As of December 2021, the total number of views of these materials exceeded 56 million. These e-books, fascicles, review tests, and materials developed for central exam preparation provide students with key opportunities to consolidate and assess their learning.

In November 2021, the MoNE made another important decision regarding educational materials by printing and distributing supplementary materials to all schools free of charge. This step supports students who have difficulties accessing educational support materials that are already shared digitally. This step guarantees all students access to helpful resources and mitigates the need for external resources. In the 2022-2023 academic year, MoNE published and distributed educational support materials to the students when the academic year started. Thus, more than 136 million educational support materials were prepared, printed and distributed to the students free of charge at the beginning of the recent academic year.

THE FAMILY SCHOOL PROJECT

For a long time, studies have revealed that families' characteristics and educational involvement are closely related to their children's educational outcomes (Abd El-Fattah, 2006; Hafner et al., 2018). The impact of education increases when it is supported by the parents (Voorhis et al., 2013). In this respect, educational projects targeting families, increasing their participation in education and defining them as 'lifelong learners' are also increasing.

An important issue for families is their adaptation to the technological transformation and improvement of their communication with their children in these new conditions.

The technological transformation leads to significant changes, especially in the preferences of young people and in their relations with peers and families (Villegas, 2013). Therefore, parents may face challenges in understanding and empathizing with their children during this transformation.

MoNE has started a new project in order to support parents and increase their communication skills with their children, raise their awareness of technological transformation, and develop adult skills (MoNE, 2022). This project aims to inform parents about various types of addiction, improve their conflict and stress management skills, provide healthy nutrition and proper exercise, and support their moral training.

The training program was developed by academics and experts and was disseminated throughout Türkiye. Firstly, the studies started in 7 provinces and were expanded while 10,789 teachers participated in these trainings. The number of parents who benefited from the training of these teachers reached approximately 40 thousand in a short time. MoNE set a new target for the project to increase inclusiveness and reach 1 million parents.

VILLAGE LIFE CENTERS PROJECT

After the industrial revolution, the location of production and employment areas in cities accelerated the migration of people from villages and low-population areas to cities (Williamson, 1995). During this process, cities have grown to serve the ever-increasing population and have expanded to provide services such as education, health, etc. The concentration of services in cities is also related to buildings, institutions, etc., which were used for service purposes in the previous period to become inactive.

MoNE has initiated an important project that will activate the buildings in villages and low-population areas, which are idle and inactive for various reasons, primarily immigration. The “Village Life Centers Project”, which was initiated in 2022, aims to use these buildings for educational and social purposes. For this purpose, idle and inactive buildings are primarily used as preschools and/or primary schools, depending on their physical condition. Alternatively, the buildings, which are used as lifelong learning facilities, offer training on agriculture and husbandry. MoNE cooperated with the Ministry of Agriculture and Forestry to develop and implement training on agriculture and husbandry. Consequently, idle and inactive buildings are transformed into village life centers and serve multiple purposes.

Village Life Centers, whose number reached 2,000 in a short time, created a new opportunity for the education of students and adults living in these areas. With the reduction of the minimum number of students from 10 to 5 to open a kindergarten in low-populated areas, the centers contribute significantly to the preschooling of students.

10,000 SCHOOL IN PRIMARY EDUCATION PROJECT

Based on the “1,000 Schools in Vocational Education Project” positive outcomes, MoNE decided to use a similar approach for supporting schools with diverse levels of education. In this context, the “10,000 Schools in Primary Education Project”, launched in 2021, aims to support schools at the primary education level with a budget of over 3 Billion TL (MoNE, 2022).

The project aims to create an all-inclusive improvement in selected schools via multiple supports. In this manner, it is planned to improve the physical environment of schools, provide

additional educational opportunities to teachers and students, and prioritize the participation of parents in education. Physical improvements include carrying out small and large-scale maintenance and repair works, establishing new laboratories, sports fields and playgrounds in schools, renovating teacher rooms, building support training rooms, and purchasing materials such as security items, printers, and computers. Specific trainings were provided to students, such as, coping with addiction, protecting the environment and nature, traffic safety, and first aid. Additionally, students who did not reach the expected competencies were included in the IYEP program. Teachers were trained on measurement and evaluation, coping with addictions, climate change and environmental awareness, digital literacy, and first aid. The trainings for parents provided first aid and ways to cope with different types of bullying and addiction.

As of September 2022, the targets of the project were mostly achieved. At the primary level, minor and major maintenance repairs were made in 8.324 schools, computers and photocopiers were purchased for the use of students and teachers in 6.260 schools, sports equipment was purchased in 3.745 schools and/or sports fields was created, and security systems were installed in 3.483 schools.

106,224 teachers and 13,344 school administrators participated in the teacher trainings given within the scope of the project. Therefore, most teachers and school administrators in these schools have been included. Participation in the trainings for students has exceeded 2.7 million. Another important achievement of the project is for the parents; more than 700 thousand parents attended the trainings.

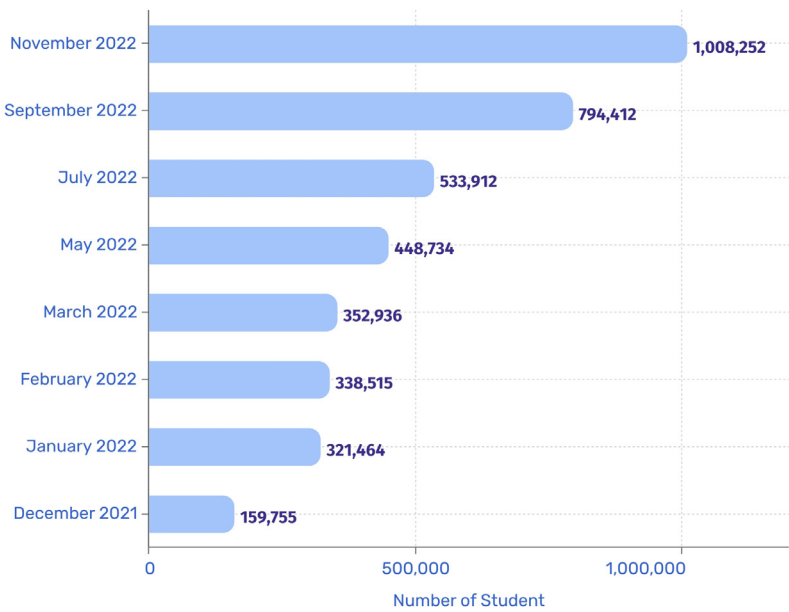
IMPROVING APPRENTICESHIP TRAINING AND ADULT RE-SKILLING

Apprenticeship education is a type of education that is based on the traditional master-apprentice relationship and aims to increase students' vocational skills. For many years, apprenticeship training, implemented through vocational training centers (VTCs) in Türkiye, has been a part of the vocational secondary education system. Studies show that both the employment rates of VTC graduates and the employment rates in the field of education are higher than in other education types (Özer & Suna, 2020).

During their apprenticeship, students receive wages, and are insured against work accidents and occupational diseases. MoNE has taken important steps with the changes in Vocational Education Law No. 3308 in December 2021. Based on the improvement in this law, the wages of our students who became journeymen after the end of the third year of apprenticeship education increased from one-third of the minimum wage to half. In addition, the government provided the wages of all students studying at VTCs; thus, employers no longer have financial responsibility. The physical infrastructures of VTCs have been strengthened to increase their circulating capital production. The society was informed about the opportunities offered by VTCs.

After these steps, student demand for VTC programs has increased tremendously. Figure 44 shows how the number of VTC students has changed over time.

Figure 44. Number of VTC Students in Last One Year

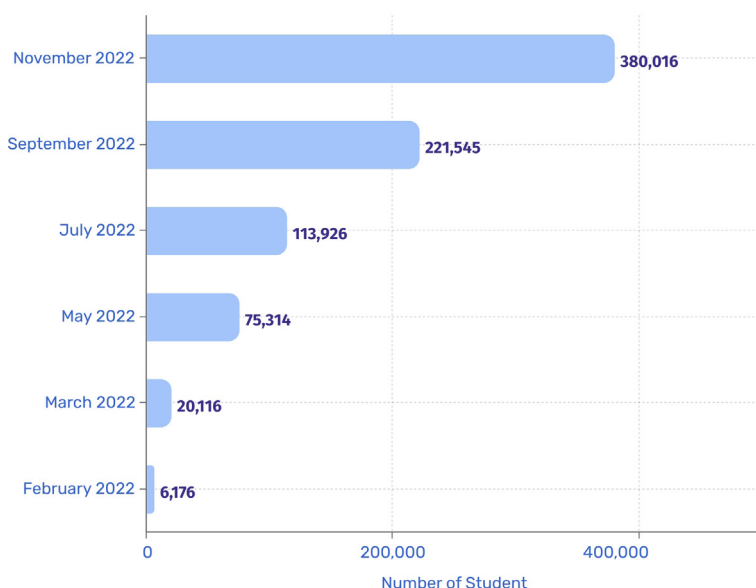


As seen in Figure 44, the number of VTC students has increased significantly since December 2021, from 160 thousand to over 1 million. As a result, the improvements made by MoNE were quickly reflected in student demands. Furthermore, MoNE has exceeded its target of 1 million students as of November, 2022.

MoNE has created a new program in which adults’ reskilling and upskilling via the flexible education model of VTCs. Within the scope of the VTC upskilling and reskilling program, people who have graduated from at least high school can gain professional skills by participating in short training programs of 6 to 8 months. This program has the potential to contribute to reducing the

ratio of youth neither in employment nor in education (NEET-not in employment, education or training). Figure 45 shows the number of participants enrolled in the VTC reskilling and upskilling programs.

Figure 45. Number of Students in VTC-Reskilling and Upskilling Programs since February 2022



As can be seen in Figure 45, VTC reskilling and upskilling programs have received significant demand from participants. In just seven months, the number of participants increased from 6 thousand to 380 thousand. Considering the short and application-oriented structure and the employment opportunities offered by these programs, it seems likely that they can significantly contribute to the employability of graduates through skills transfer.

DESIGNING AN ENVIRONMENT-FRIENDLY EDUCATION SYSTEM

The fact that nature is faced with great human destruction today has many dire consequences. Increasing waste due to consumption habits, the destruction of natural areas to sustain increased production, and the destructive effects of climate change are all the causes of a large-scale deterioration in nature (Coristine & Kerr, 2011; Vergara & Tchobanoglous, 2012). It is not difficult to predict that if nature is continued to be destroyed at this rate, the consequences will result in global climate and food crises, the extinction of many living species, and the long-term rendering of the earth unsuitable for human life (Steffen et al. 2018).

As the negative consequences of the destruction in nature become evident, the responsibility and attention of education systems have increased (ETF, 2021). In many education systems, methods to protect the environment and various topics that will increase awareness of nature have been added to the curriculum. Furthermore, projects to encourage these skills, called “green skills”, have also been implemented (ETF, 2021; Maclean, Jagannathan & Panth, 2018). Learning environments are created to support students’ learning by doing and experiencing, and schools are equipped with environmentalist features (Gordon, 2010). In this context, a global effort concentrates on raising generations with higher environmental awareness.

As of 2021, the Ministry of National Education (MoNE) has started taking many necessary steps to increase students’ awareness of nature protection and green skills. The first of these steps is the establishment of “Environmentalist Schools”, at least one in every district in Türkiye. Within the scope of this project, while newly built schools are equipped with environmental

technologies during the construction process, other schools are provided with environmentalist features (MoNE, 2022).

In the schools within the scope of the project, rainwater storage units are installed with solar panels for energy storage and efficient use. The stored solar energy and water are used for the use of the school, allowing students to observe this process. The wastes obtained in the canteens and cafeterias of these schools are collected and separated to make fertilizers. All libraries in these schools are made with recycled materials, and no additional materials are used in their production. In these schools, special areas are built, students are encouraged to grow plants, and the fertilizers produced in this process are used. Necessary recycling materials are distributed in all schools within the scope of the project, and a “zero waste” approach is fostered. MoNE successfully converted 1,325 schools into “environmental schools” in less than a year. The primary purpose of “environmentalist schools”, in which every district has at least one, is to increase the environmental awareness of students and to make these schools an example for the development of other schools in the region.

Another important breakthrough from MoNE is adding the “environmental education and climate change” course to the education programme. After Türkiye signed the Paris Agreement, a specific program was to increase students’ awareness of the subject and improve their skills. Within this scope, the context of the “environmental education” course that 7th or 8th-grade students could take as an elective course in previous years has been expanded. The scope of the course, which was expanded to “environmental education and climate change”, was enabled to be taken in the 6th, 7th or 8th grades, and the rate of the courses hour was increased.

MoNE makes significant efforts to extend the zero-waste approach to all educational institutions. Recycling bins are sent to schools, zero-waste libraries made from recycled materials are established, and materials such as notebooks produced entirely through recycling are delivered to students to encourage recycling. Finally, at the end of 2021, 6 million recycled notebooks were distributed to students in Istanbul. A zero-waste library has been installed for all 1,325 environmental schools.

NEW APPROACH FOR TEACHERS' PROFESSIONAL DEVELOPMENT

Teachers are one of the core elements of education, and they significantly impact educational quality (Bhai & Horoi, 2019; OECD, 2005). Thus, teacher characteristics have a major role in classroom management and student learning (Bhai & Horoi, 2019; OECD, 2005). Many studies, including the results of large-scale international assessments, approve that teacher characteristics are the variables among the strongest relationship with student outcomes (Hattie, 2009; OECD, 2021; Seidel & Shavelson, 2007). In this context, it is vital to create opportunities for improving teachers' professional development for better student outcomes and the quality of the education system.

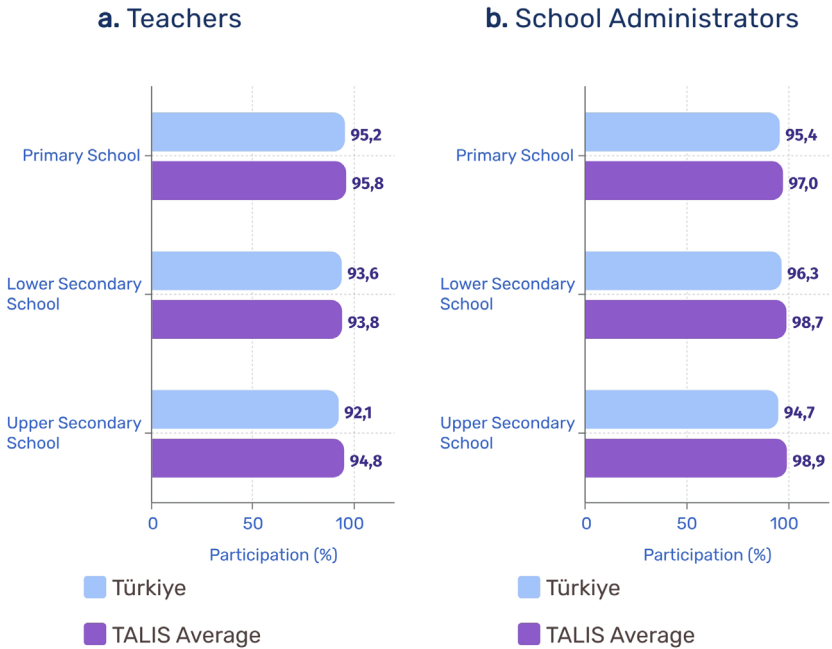
Globally, two primary ways are utilized for teachers' professional development (Musset, 2009). The first of these ways is *teachers' initial training*, which constitutes the development of teachers and is received before starting the teaching profession (Musset, 2009; OECD, 2019). In initial training, teachers increase their field-related skills besides pedagogical training. Thus, it aimed to ensure that teachers acquire the up-to-date and necessary skills to become a teacher.

The second way of the professional development of teachers is *in-service training* (Darling-Hammond & Bransford, 2005; Musset, 2009). The in-service training is critical for teachers to adapt to constantly changing conditions in order to use recent educational technologies effectively, and learn new education and teaching methods. In this context, in-service training functions as the foundational mechanism for teachers to continuously improve their skills and adapt to new conditions and requirements (Darling-Hammond & Bransford, 2005).

Professional training of teachers in Türkiye has been developed and conducted for many years under the responsibility of MoNE. Therefore, the MoNE has been determining the needs for the professional development of teachers, developing and implementing the training. This approach has led to a significant centralization of solutions offered for the professional development of teachers in Türkiye.

A highly cited TALIS results may give important insights into the participation of Turkish teachers and school administrators in professional development trainings, as presented in Figure 46.

Figure 46. Participation in Professional Development Trainings



As seen in Figure 46, the percentage of teachers and administrators who participated in professional development training in the last year in Türkiye was higher than 90%. Despite these high rates, the participation of Turkish teachers and administrators was lower than the TALIS average (OECD, 2019). Related results also indicated that the teacher trainings in Türkiye were mostly constructed as seminars or conferences. Participation in workshops and teacher trainings with practical skills were comparatively low in Türkiye (OECD, 2019).

As of the end of 2021, MoNE has adopted a new approach to the professional development of teachers. While making this change, the MoNE considered the teacher education models providing further effective educational outcomes. Recent studies show that teacher training that focuses on teachers' practical skills is designed in a way that complements each other, performed in educational institutions, and considering the education stakeholders' opinions, has a greater impact on student outcomes and provides tangible outputs (Kennedy, 2016, 2019; Opfer, 2016). The new approach reflects these characteristics for more qualified teacher training programs.

Within the scope of the new approach of MoNE, schools were allocated a specific budget for teacher training, and schools' autonomy was increased to determine and meet their educational needs for the first time in Türkiye. Within this context, schools have autonomy in determining the training subjects for their teachers and structuring and conducting the training. Additionally, the new approach increases the weight of practical skills in teacher training, and schools have been used as teacher training hubs. The Teacher Informatics Network (ÖBA) was established for all teachers, and all the resources for the professional development of teachers are uploaded on this platform. The ÖBA has great potential for overcoming capacity limitations and maximizing the inclusiveness of in-service training.

While supporting the professional development of teachers, MoNE has enacted the Teaching Profession Law to increase the prestige of the teaching profession, define teaching as a career path, and provide a unique law for teaching. With the law accepted by the Turkish National Assembly on the 3rd of February and published in the Official Gazette on the 14th of February, Türkiye defined teaching as a profession with an independent law. Thus, Türkiye has met a long-term need that has been emphasized in

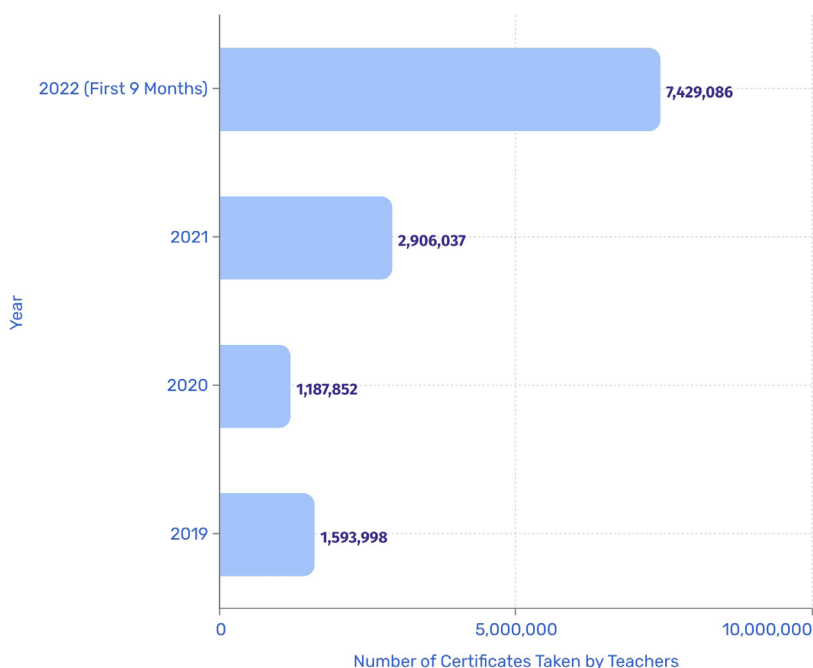
educational policy documents and National Education Councils for 60 years.

The teaching experience of teachers is appreciated with the Teachers' Profession Law. Experienced teachers were allowed to become "expert teachers" and "head teachers" by completing the specific teacher training developed by MoNE. According to the law, teachers with at least 10 years of seniority receive the title of "expert teacher" when they complete the 180 hours of "expert teacher training" and pass an exam based on the teacher training program. Similarly, teachers who have been expert teachers for at least 10 years, have completed 240 hours of head teacher training, and pass the exam based on teacher training are also given the title of "head teacher".

Teachers' Profession Law encouraged teachers to receive postgraduate education. Teachers with master's and PhD degrees are exempt from exams for teacher training. Thus, the law encourages both the post-graduate education of teachers and the personal rights of teachers. Almost 95% of the teachers with the required criteria applied to be "expert teachers" or "head teachers", 99% of the completed the training programs, and %98 of them applied for the examinations, which clearly shows the demand.

Participation in teacher training with the Teaching Profession Law and the new in-service training approach of teachers has led to an unprecedented increase in participation in teachers' professional development programs. Figure 47 shows teachers' total number of certificates through in-service training in the last four years.

Figure 47. Total Participation to Teacher In-Service Trainings

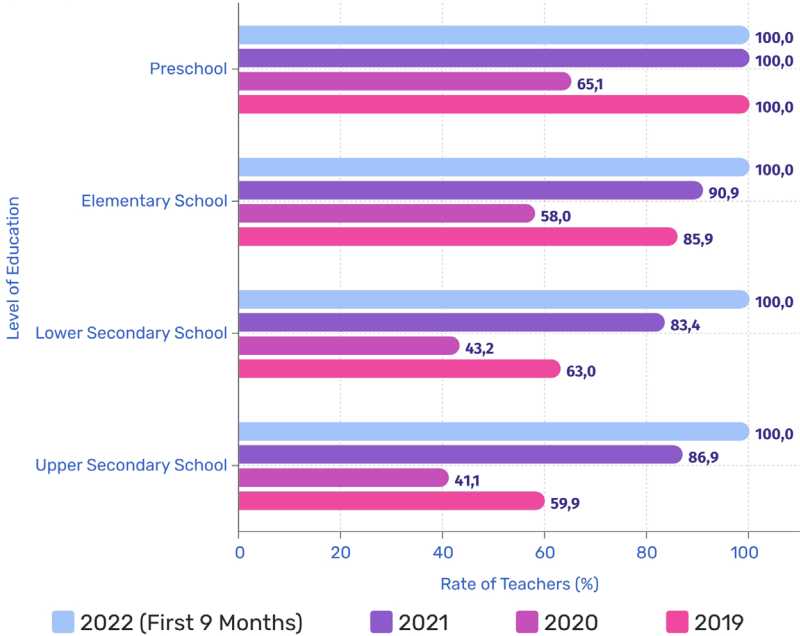


As seen in Figure 47, the number of certificates obtained by completing in-service training increased considerably in the last two years and peaked in 2022. The increase in participation started in 2021 with the new teacher training approach and reached almost 7.5 million in 2022 from 3 million in 2021. The trend indicates the contribution of a new approach to a tremendous rise in the inclusiveness of in-service training.

Figure 48 also shows the participation rates of teachers from different levels of education levels as another indicator of the inclusiveness of in-service training.

Figure 48 indicates the increase in the rate of teachers participating in in-service training at all education levels. In 2022, this increase peaked, and almost all teachers at different education levels participated in at least one in-service training activity.

Figure 48. Rate of Teachers Participated to In-Service Trainings by Education Level

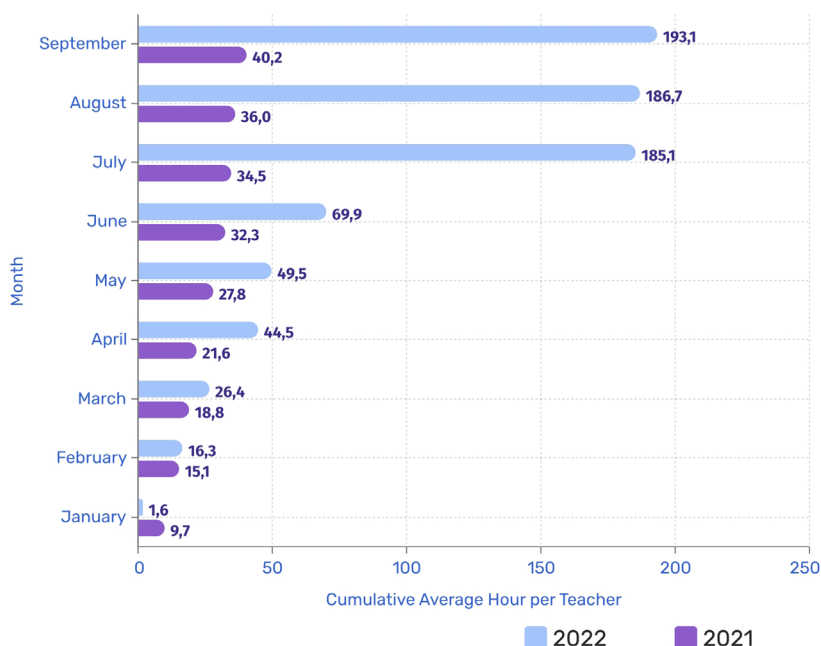


Additionally, a rapid rise in participation rates has occurred in the last two years, which fell in 2020 due to the COVID-19 pandemic. In this context, the new approach alleviates the epidemic’s negative impact while increasing inclusive teacher trainings.

Figure 49 also illustrates a comparison regarding the participation in in-service trainings between 2021 and 2022.

As seen in Figure 49, the average teaching hours per teacher between 2021 and 2022 differ significantly. The gap between both years has even widened with an expert teacher and head teacher training initiated in July 2022 (July 2021: 34.5 hours, July 2022: 185.1 hours). As of September, the average training hours per teacher reached its highest level with 193 hours, almost quintupling the average hours in 2021.

Figure 49. Average Training Hour per Teacher in 2021 and 2022



ENHANCING LIFELONG LEARNING ACTIVITIES

Adults constitute an important part of societies, and the share of adults is increasing in today's aging societies (European Commission, 2012; ILO, 2009). Even though educational investments mostly focus on schooling-age children, adult education opportunities are critical for their adaptation to rapidly changing social and economic conditions (OECD, 2019). Globally, a major part of adults has the potential to contribute the economic development with reskilling and upskilling mechanisms (CEDEFOP, 2020). It is an important need based on the fact that automation and artificial intelligence-assisted technologies lead to great changes in daily life and labor market (Özer & Perc, 2020). These changes are affecting our lives faster than ever, and adults need more support to adapt to these changes.

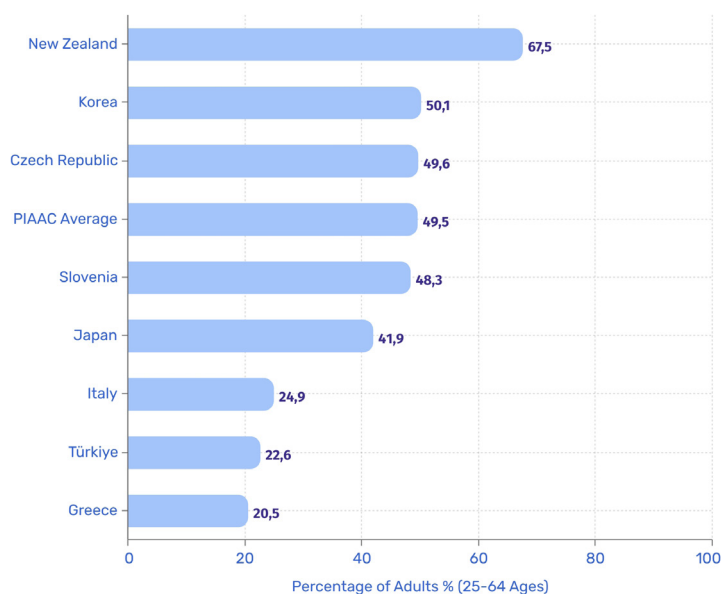
Adult education has come to the fore, especially in the 1990s, although it has been included in the education debates since the 1920s (Stubblefield, 1976; UNESCO, 2009). The reskilling and upskilling of adults contributes to the development of society in diverse ways. First of all, adults have an opportunity to update their skills and acquire new skills (CEDEFOP, 2020; UNESCO, 2009). Studies show that adult participation in lifelong education improves many aspects, from personal health to well-being, from employability to life satisfaction (Field, 2011; Granderath, Martin & Froehlich, 2021; Midtsundstad & Nielsen, 2019). Secondly, expanding adults' reskilling and upskilling leads to a major contribution to national development and social welfare (Reder, 2010; Sklias & Chatzimichailidou, 2016).

Recently, adult education has been evaluated within the "lifelong learning" approach. The fact that education has become essential for individuals not at the schooling age has played an important

role in adopting this approach. International organizations such as the OECD, the World Bank, and the ILO emphasized the importance of encouraging adults' participation in lifelong education (Abadzi, 2003; ILO, 2018; OECD, 2005). Thus, the participation of adults in lifelong learning activities is included policy agenda of countries (Eurydice, 2021).

The importance of developing adult skills through lifelong learning activities has led to the emergence of large-scale assessments in this area. OECD, carried out by The Program of the International Assessment of Adults Competencies (PIAAC), is among the pioneering research in this field (OECD, 2019). The PIAAC 2015 results gave important insights into adults' participation in formal and informal trainings, as in Figure 50 (OECD, 2017).

Figure 50. Participation of Adults in Formal or Informal Trainings



As seen in Figure 50, the participation of adults in formal or informal trainings differs significantly among countries. As the PIAAC average was 49.5%, the participation rates of countries changed between 67.5% and 20.5%. The figure indicated that almost every one of two adults in countries participated, on average formal or informal (or both) trainings in PIAAC countries. However, in countries including Italy (24.9%), Türkiye (22.6%), and Greece (20.5%), the participation rates were lower than 25%. These countries have a significant need for an increase in the participation of adults in both formal and informal trainings.

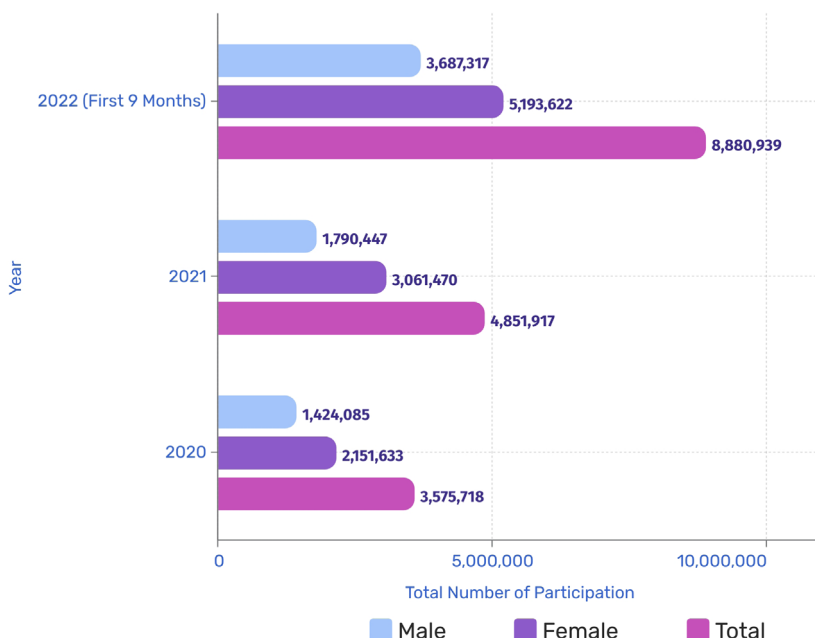
Secondly, results from PIAAC 2015 cycle may give insights into the global situation of adult skills. Results show that one out of every five adults participating in the PIAAC has the lowest level of verbal or digital literacy (OECD, 2019). Additionally, one in every four adults in OECD countries has little or no computer interaction and does not consider themselves competent to use a computer (OECD, 2019). These results show the importance of improving adult skills for adapting to today's society and daily life.

Türkiye, which participated in this study, also performed below the OECD average, with approximately 45% of adults at or below the lowest level of information literacy proficiency. In numerical literacy, this rate was calculated as approximately 49% (OECD, 2019). One of the crucial emphases in the OECD report is that the proportion of adults who graduated from an education level below secondary education is relatively high in Türkiye (OECD, 2019). In a recent study by Eurydice (2021), Türkiye was grouped among the countries where the proportion of adults participating in lifelong education activities is low and the high rate of adults with low proficiency. Thus, the results from international studies clearly show an urgent need for adults' reskilling and upskilling through lifelong education activities.

Public education courses (PECs) are the primary source of adult education in Türkiye. These courses aim to skill acquisition of individuals outside the schooling age. MoNE launched a vital campaign to enrich the educational activities in PECs in 2021. Within the scope of this campaign, the subjects and expansion of PECs across Türkiye were diversified, the capacities of courses were increased, and the opinions and needs of adults were prioritized in the planning of PECs.

Figure 51 shows how the participation of adults changed before and after these improvements in PECs.

Figure 51. Total Participation to Lifelong Learning Courses



As seen in Figure 51, 2022 is the year in which participation of adults in lifelong learning activities peaked. The participation reached approximately 9 million, nearly doubled in 2021 and tripled in 2020 in the first 9 months of 2022. Another important indicator is that female participation in lifelong education activities has been intense since 2020. In this context, the rate of female participation in lifelong education activities in the last three years has been around 60%. This trend did not change in the significant increase in participation in 2022; again, approximately 60% of the participants were female. This is very important in supporting female employment participation through skill development activities.

Figure 52 shows how participation has changed by month and gender in 2022.

Figure 52. Total Participation to Lifelong Learning Courses 2022 by Gender

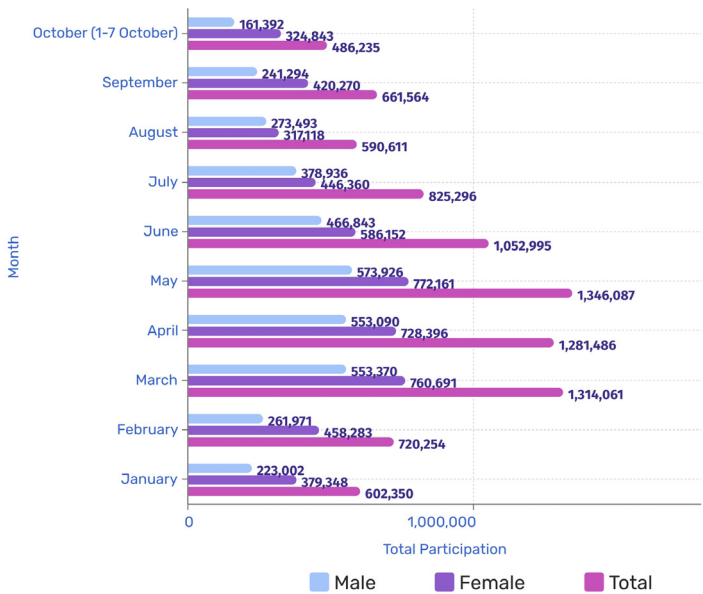


Figure 52 indicates that participation in lifelong learning activities remained relatively high throughout 2022. Particularly between March and June, the monthly attendance of more than 1 million started to decrease partially as of July when the schools were closed. Additionally, the females' participation was always higher than males and the gap widened in the months when the semester continued. As of 2022, MoNE has largely achieved its goal of one million monthly participation in lifelong learning activities. For the first 10 months of 2022, participation in lifelong learning activities has averaged 890 thousand per month.

TURKISH, MATHEMATICS AND FOREIGN LANGUAGE CAMPAIGNS

Another essential step by MoNE is the campaigns initiated in core areas and specific fields where students perform relatively lower. These campaigns aim to increase student achievement by using diverse education methods and enriched education materials in prioritized areas. In line with this purpose, steps are taken to cope with students' anxiety in mathematics, Turkish, and foreign languages. The campaigns aimed to attract their attention, associate these subjects with daily life, and develop support materials for students.

The first step in this context was taken with the "Mathematics Campaign" (MoNE, 2022). Mathematics has been among the disciplines where Turkish students have relatively low performance in national and international large-scale assessments (MoNE, 2020, 2021; OECD, 2019). Thus, diverse activities are implemented simultaneously to change the approach of students toward mathematics, minimize their anxiety and enable them to develop positive attitudes toward mathematics.

Within the scope of the mathematics campaign, it is ensured that mathematics is associated with daily life from preschool to the end of upper-secondary education, gamification and innovative educational materials, and teachers' training for new approaches to mathematics. Within the scope of the project, MoNE produces educational games and interactive materials about mathematics and creates digital platforms such as virtual museums.

In 2022, MoNE launched the "Mathematics Digital Education Platform". On this platform, students are provided with mathematics education by using up-to-date technologies while developing a positive attitude. Students can rotate various objects in all axes and degrees through three-dimensional interactive animations and improve their numerical reasoning with mathematical games. Using this digital platform, training is organized by academicians and experts in the field of mathematics. "Coding and Mathematics Week" and "STEM and Scientix Week" were conducted to improve students' skills in a short time after the launch of the platform. On the other hand, the "Professional Development Webinar Series" was conducted for teachers to develop innovative materials and learn different mathematics teaching methods.

Within the scope of the mathematics campaign, "mathematics corridors" were established in schools with suitable physical facilities. School corridors are equipped with mathematical symbols, concepts and figures. Diverse math questions and answers are included in these corridors. In this way, the use of mathematics in the environments frequently used by students has been expanded.

The other priority of MoNE in 2022 was on students' language skills. For this purpose, MoNE initiated the "Turkish Language Campaign" and "Foreign Language Campaign". As known,

language skills are considered the source of all academic and social skills, and the development of language skills also supports achievement in other areas (Duff & Tomblin, 2018; Uccelli et al., 2013). However, language skills are under threat due to changing reading habits due to rapid technological developments and the increasing use of social media (Al-Sharqi & Abbasi, 2020; Kojo, Agyekum & Arthur, 2018). Studies showed that students have significant challenges in reading lengthy- texts and fewer hours of reading (Twenge, Martin & Spitzberg, 2019).

Since core academic and language skills are among the areas evaluated in national and international large-scale assessments (MoNE, 2020; Mullis et al., 2017; OECD, 2019). MoNE developed the “Turkish Language Test in Four Skills” to evaluate students’ language skills within the scope of four basic skills (reading, listening, writing, and speaking) by international criteria. MoNE has used its departments effectively in the development of assessment: The development of the assessment software, the assessment frameworks, and exam items for the 4th, 7th, and 10th grades, implementation, and scoring was conducted by MoNE experts. A pilot study was performed through language labs established in 15 provinces. These labs were equipped as modern digital assessment hubs: with computers including microphones for voice recording and headphones for listening. MoNE conducted the initial assessment in 2022 with the participation of approximately 3 thousand students from each of the three grade levels. Thus, for the first time in Türkiye, the Turkish language skills (reading, listening, writing, and speaking) of native students at different grade levels were assessed through a computer-based format. The results will be used as feedback for Turkish language education.

As a part of the Turkish campaign, “Good Practices in Language Education: Action Research Conference” was conducted in May

2022. 60 best practices for teaching/learning the Turkish language are selected at this conference and planned for dissemination across Türkiye. In addition, innovative materials for language education, establishing a particular digital platform, and intensifying training for teachers will be ensured.

Within the scope of the “Foreign Language Campaign” launched in 2022, it aims to support students’ foreign language skills in English, Arabic, French, German, Spanish and Italian. A new approach will be used, including different education methods, developing educational materials, and intensifying teacher training in foreign languages, where students have relatively low performance in large-scale national assessments (MoNE, 2020, 2021).

The first step in this campaign was developing a book set titled: *Adventures of Zury*, which was presented to students through digital platforms. Materials prepared for primary school (2nd and 3rd grades) aim to support foreign language education by gamification. The series includes reading and speaking exercises, and the content is structured to provide multi-skill language development. Upon completing the book, students also have a chance for self-assessment, peer, and group assessment. The new book series will also be available in the “Foreign Language Digital Platform”, which is currently developing by the MoNE.

Another step within the campaign is to promote support courses for foreign languages. Currently, foreign language courses are in the scope of DYK courses, which have been the academic support and remedial education programs of the MoNE for many years. Thus, students will be able to take additional foreign language courses in public schools within the scope of DYK without paying any fee. Therefore, MoNE improves foreign language education within the scope of formal education and also ensures

that students can receive additional foreign language education outside of the formal education period.

To improve teacher skills, foreign language teachers are informed about new teaching methods and the use of new materials developed within the scope of in-service training. In addition, the professional development of foreign language teachers is supported by cooperating with various international organizations.

SUMMER SCHOOLS IN PUBLIC SCHOOLS

The COVID-19 pandemic has posed major challenges to education systems. Schools have been closed in many countries, and the number of students deprived of face-to-face education has exceeded 1.6 billion to stop the progress of the pandemic (Özer et al., 2020; Pokhrel & Chhetri, 2021). In other words, the pandemic has pushed more than 90% of the global student population out of schools for the first time in modern history (Pokhrel & Chhetri, 2021).

During the pandemic, many countries utilized distance education to continue their educational activities (World Bank, 2021). The rapid transformation from face-to-face education to distance education in a limited time has resulted in significant gaps between countries and regions (UNESCO, UNICEF & World Bank, 2021). Many factors, such as access to the necessary equipment and digital literacy for access to education, have increased the inequalities of opportunity in education (Lai & Widmar, 2021; Özer & Suna, 2020). Many countries have tried to cope with increasing inequalities by providing support, such as hardware, free internet connection, and mobile access points to ensure their students' access to education (European Union, 2020; UK Department of Education, 2020).

Despite these supports of countries, school closures have led to significant negativities (Engzell, Frey & Verhagen, 2021; Hammerstein et al., 2021). The main reason is that schools have diverse social and societal functions beyond teaching. Students' daily routines are disrupted, their physical movements are restricted, and their interactions with peers and teachers are limited (Buheji et al., 2020; Egan et al., 2021). This has affected education and students in many ways: the most conspicuous effect is learning losses (Engzell, 2021; Hanushek & Woessmann, 2020). The lack of interaction of students with their teachers and peers in schools has affected education (Di Pietro et al., 2020). Digital technologies have not completely replaced face-to-face education, and the effectiveness of student learning has become limited.

Another critical consequence of school closures is the frequent problems with students' social and emotional skills (Martinsone et al., 2022; Medeiros et al., 2022). Studies show that the general well-being of students deteriorates, and psychological problems become widespread due to physical limitations and disruption of daily routine during this period (Martinsone et al., 2022; Medeiros et al., 2022). This reveals how vital the social environment provided by the school is for students.

The apparent challenges of COVID-19 make the remedial mechanisms and support programs for students obligatory (UNESCO, 2020; UNICEF, UNESCO, and the World Bank, 2022). Thus, countries use diverse methods and ways to promote learning against learning losses. A recent study from UNICEF, UNESCO, and the World Bank (2022) revealed that the most used remedial strategies were increasing instruction time, individualized self-learning programs, tutoring and coaching sessions, accelerated learning programs, and catch-up programs. In late 2020, the USA, the Philippines, and Italy provided

remedial education and substitute classes to cope with learning losses (UNESCO, 2020). Belgium has provided free summer schools for all students, and France extended the semester to the summer, and summer camps and schools were provided to students (UNESCO, 2020).

Türkiye has been among the countries where schools are closed for a relatively long time due to the Covid-19 pandemic (OECD, 2022; Özer et al., 2022). Educational activities were carried out through distance education for about 1.5 years when schools were closed (Özer, 2020). To cope with the inequalities and challenges of the pandemic, Türkiye provided more than 600 thousand tablet computers and free internet packages to students in need. Additionally, mobile support points were established, and distance education was broadcast on newly established television channels. Furthermore, the digital platform (EBA) infrastructure, the platform that supported distance education, has been improved, enabling live courses to be conducted (Özer, 2020).

In the 2021-2022 academic year, schools were reopened in Türkiye with all necessary precautions (Özer et al., 2022). After the opening of the schools, diverse projects have been initiated to compensate for the learning and social skills losses due to distance education. One of these projects is opening summer schools in public schools for the first time in Türkiye. Summer schools are beneficial for both coping with the adverse effects of learning losses and improving the social and emotional skills of students. In this manner, Türkiye has initiated a large-scale project, which is in coherence with the recommendations of international organizations, including UNESCO, UNICEF, and the World Bank.

“Science and art” were selected as the themes of summer schools in Türkiye to improve students’ cognitive, social and emotional skills. In the science theme, mathematics and foreign language are prioritized in the summer schools opened under the headings of 414,731 students educated in mathematics summer schools and 327,104 students in English summer schools. In addition, Science and Art Centers (BİLSEM), used for gifted students’ education, were also used effectively in summer schools. In BİLSEMs, students have participated courses and activities related to music, visual arts, aviation, robotics, and cognitive games. Thus, the number of students participating in different summer school programs has approached 1 million. Summer school programs will continue in public schools to compensate the learning losses and support the formal learning process in following years.

A NEW DIGITAL PLATFORM FOR INDIVIDUALIZED LEARNING & SUPPORT

Today, education systems attach special importance to providing solutions for students’ personal learning needs (Conrads et al., 2017; UNICEF, 2022). Personal characteristics affect the learning process; thus, learning gaps differ significantly among students (Graf & Kishuk, 2012; UNICEF, 2022). In this respect, determining students’ personal learning needs and providing tailored solutions for these needs have the potential to increase the efficiency of educational activities (Shemshack & Spector, 2020). Studies show that individualized education and support platforms may significantly improve the learning experience (Shemshack & Spector, 2020).

Recent educational technologies have great potential to provide students with personal support (Twyman, 2018). These technologies use various methods to identify students’

development areas and offer specific suggestions. Therefore, a personal assessment and orientation become possible for each student. This personalized approach allows students to raise the engagement of their learning needs (Twyman, 2018).

MoNE took an important step to meet the individual needs of students by developing the Teacher-Student Digital Support System (ÖDS) in 2022. This platform examines students' skills, identifies the learning gaps in diverse disciplines, and directs them to the related educational materials of MoNE. While developing this platform, the support materials and digital education content developed by MoNE in recent years were used. As a digital individualised learning platform, ÖDS has a significant potential for alleviating the impact of learning losses.

ÖDS has an item pool with more than 60 thousand items for different education levels. Through these items, students' skills and learning gaps are determined. As a result of the assessment, students are guided to educational materials developed by MoNE, depending on the subject. Therefore, each student receives personal recommendations for personal learning gaps.

The platform also allows teachers to identify and monitor the development areas of their students and present suggestions. Teachers can prepare assessments in their disciplines using the entire item pool, where they can assign assessments to their students through the platform. Teachers can also monitor their students' performance after completing the assessments.

The platform developed by MoNE will continue to be enriched with monthly educational support materials. The platform was made available to all students and teachers in Türkiye.

THE RELATIONSHIP BETWEEN CULTURAL POWER & EDUCATION IN LIGHT OF THE DEVELOPMENT OF EDUCATION IN TÜRKİYE OVER THE LAST TWO DECADES*

Mass education emerged globally in the early 19th century and expanded in the aftermath of World War II to include higher education. Many nations, starting with the United States and the Western European countries, made it easier for all their citizens to access education, while implementing new, large-scale projects to improve their society's overall level of education. By the 1970s, mass education had spread to higher education in those countries; the enrollment rate in primary education neared 100 percent, and the process of universalization enabled more than half of the entire population to access higher education.

The driving force behind this expansion was the realization that human capital is the most powerful, long-term resource available to any given country. Increasing the average number of years of schooling per member of society not only contributes to their employability and increases their adult skills, it empowers them to make greater contributions to their nation's development. Accordingly, investing in human capital makes a significant impact on economic development as well as social peace and welfare.

Since the Republic of Türkiye's foundation, increasing the schooling rate has been among the stated priorities of almost every government. Significant progress has been made on that front, especially at the level of primary education. It is important to acknowledge, however, that Türkiye lagged behind the Organization for Economic Co-operation and Development (OECD) countries, in particular, by the early 2000s in terms of massification and universalization in education.

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Whereas many OECD countries had largely completed the process of universalization by the 1950s and thus began to prioritize the quality of education, Türkiye did not initiate universalization until much later. Accordingly, various large-scale projects have taken place since 2002 to promote massification in education and ensure that Türkiye could compete with other OECD states in that area.

From 2002-2022, Türkiye made significant progress with regard to almost all educational indicators. Due to the long-standing problems impeding access to education at all levels except primary, the country initially concentrated on improving access to education. Accordingly, additional schools and classrooms were built, prioritizing those provinces and regions where the schooling rate was relatively low. At that point, Türkiye dared to tackle the root causes of the problem, making investments nationwide rather than only in specific parts of the country. Consequently, those provinces and regions that had once suffered from schooling-related problems ended up on par with the rest. Massification in education thus occurred homogenously across the nation.

Improving access to education in a large-scale education system, as in the case of Türkiye, requires significant investment. That is why the Turkish governments made a massive investment to increase the number of schools and classrooms to oversee that transformation. It was also important for those investments to be managed in such a way that they would promote balanced growth. The investments Türkiye made at the time resulted in significant improvements; the government prioritized disadvantaged areas to bridge, rather than deepen the existing gaps. Those investments began to yield results within a rather short amount of time (Özer, 2022). Accordingly, there was a notable increase in the schooling rate for all levels, from pre-school

to higher education. For example, the pre-school enrollment rate for 5-year-old children increased from approximately 11 percent in the 2000s to 93 percent today. During the same period, the schooling rate at the middle school level soared from 44 percent to 90 percent (Özer, 2022)

It is possible to better appreciate the positive impact of those improvements by taking a closer look at how the schooling rate changed at the provincial and regional levels. Thanks to the governments' investments, the schooling rate in many provinces that had been relatively low in the early 2000s surpassed the national average (Özer, 2022). Importantly, the gap between various regions within the country has been alleviated significantly. Those provinces in which the schooling rate was the lowest in 2000 witnessed an increase in those numbers, which eventually reached the same level as those provinces with the highest levels of enrollment.

In addition to the investments that Türkiye made at the time, systemic regulations played a significant role in the country's progress. Among other things, the decision to increase mandatory education from eight to twelve years strongly influenced the improvement in the schooling rate. Likewise, the country made notable progress vis-à-vis the schooling rate at the level of higher education. Compared to approximately 14 percent in 2002, the higher education schooling rate has increased to roughly 44 percent today.

As Türkiye began to reach its massification goals, it revisited its objectives and started concentrating on improving quality indicators. As the number of students continued to increase at all levels of education, it attached special importance to two priorities (Özer, 2021): keeping the average number of students per classroom low and moving the average number of students

per teacher closer to the OECD average. Taking stock of the country's progress today, it is possible to say that both goals have nearly been reached. Whereas the total number of classrooms increased from approximately 300,000 to some 850,000 during the past two decades, the number of students taking classes in 56 percent –more than half– of those classrooms remains under twenty-five. At the same time, the country has constantly worked to hire a large number of teachers in an attempt to lower the average number of students per teacher. Hence the increase in the total number of teachers from approximately 500,000 in the 2000s to nearly 1.2 million today. Thanks to this investment in particular, the student/teacher ratio at all levels of education in Türkiye has moved closer to the OECD average.

DEMOCRATIZATION IN EDUCATION

The last two decades have been critically important for both massification and democratization in education. During this period, Türkiye ended long-standing, anti-democratic practices and began to take into consideration the people's demands. It is a well-known fact that educational systems are responsible for helping students gain necessary, up-to-date skills, and for responding to contemporary demands. As such, Türkiye began to pay more attention to society's expectations from education as it took steps to promote massification. In retrospect, the past twenty years represent a turning point for the country's education system. It is particularly important to underscore that the process of massification in education benefited socio-economically disadvantaged social groups more than the general population. Accordingly, that period is significant both in terms of ensuring equality of opportunity in education and improving the democratization of education.

One of the most significant improvements occurred in the schooling rate among girls. The long-standing problems facing girls' enrollment in school were addressed within the same time frame, and the gender gap shrank, especially over the last decade. In many provinces where girls had been notably less likely to go to school than boys in the early 2000s, the schooling rate for girls came to surpass the schooling rate among boys (Özer, 2022). Indeed, the available data indicate that the schooling rate for girls has significantly increased at all levels of education. For example, the schooling rate at the level of higher education was 22.4 percent for males and 19.7 percent for females between the ages of 18 and 22 in 2007. Those numbers currently stand at 40.5 percent for males and 46.3 percent for females. In other words, the schooling rate for girls reached the same level as the schooling rate for boys –and even surpassed it at the level of higher education– for the first time during this period.

Over the last twenty years, Türkiye has repaired the damage that the social engineering projects of the previous decades had inflicted on society through education policy. Among those damaging policy decisions was the ban on the religious headscarf. Ironically, the public authorities of the time complained that girls could not be incorporated into the education system sufficiently –while imposing a ban on the headscarf to deny access to the female children of religious citizens. It is a well-known fact that Turkish women faced many challenges in their attempts to overcome that ban, especially in higher education, and many who had the financial means to do so relocated to other countries. The authorities who implemented such policies were not only unimpressed by such dramatic stories, they failed to recognize the role of their restrictions within the context of violence against women and brain drain. Ultimately, Türkiye abolished the headscarf ban, arguably the single greatest obstacle to education, in 2013 and took the additional step of lifting related restrictions

on the employment of women –a remarkable accomplishment for women’s socialization.

Another project for structuring the society had imposed restrictions on the access to higher education by high school graduates who had studied religious instruction or completed vocational schools. The coefficient regulation decreases significantly the scores of students in vocational high schools and İmam Hatip high schools when they apply for the higher education programs. That practice, which dated back to 1999, functioned to discourage successful students, who could pursue higher education, from attending the İmam Hatip and vocational schools. Consequently, academically high-performing students mostly ignored both types of high schools, leaving these schools with an increasingly homogenous group of students who lacked academic merit and/or could not get into any other school.

Remaining in effect for more than a decade, that regulation not only prevented those students who could potentially pursue higher education from receiving religious instruction, it inflicted severe damage to vocational education, which came with a heavy price tag for the labor market. That policy, which the authorities persistently implemented for long years, changed society’s perception of vocational and İmam Hatip high schools. In this sense, there was a deliberate attempt to determine how society viewed certain institutions in addition to the choices that students made in secondary education. The negative impact of that measure, which the authorities considered education policy, was not confined to the education system. The labor market, too, had to endure the consequences of a disruption in the natural flow of students, as the inability to find employees with the necessary qualifications took a toll on Türkiye’s economic development (Özer, 2021). That practice, which undermined the balance of both types of high schools, ended after many attempts

in 2012. Meanwhile, it became possible for students enrolled in other types of high schools to take elective courses on the Qur'an, the Life of Prophet Muhammad and religious knowledge. Accordingly, the Turkish government addressed an important, popular demand by making such courses available to students.

DISCUSSION AND CONCLUSION

In retrospect, it is perfectly clear that it would not have been possible to discuss the quality of education today had it not been for the massive investments made in the 2000s, since major investments geared toward massification would still have been at the top of Türkiye's education agenda. In other words, it is important to highlight that all of those investments and quantitative improvements laid the groundwork for enhancing the quality of education in Türkiye.

It is crucial to note that Türkiye did not achieve massification in education at the expense of quality. Quite the contrary: there has been steady progress in both massification and the quality of education. Initiatives like the Program for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS), which track the performance of international students periodically, confirm that Türkiye has steadily improved its performance against the backdrop of its massification process (Özer, 2021).

The contemporary debate on education quality ignores an important aspect. Quality is about a certain process. It is important to recall that those educational institutions that are considered high quality today originated from rather humble beginnings and became institutionalized over time. What matters is to nurture each humble beginning with a focus on quality and a culture of constant improvement. The expansion or establishment of new institutions is not inherently problematic for the quality.

Why, then, did Türkiye have to wait until the 2000s to oversee the transformation in education that occurred over the last two decades? Given that those OECD countries which we considered good examples and are now competing against increased their schooling rates at almost all levels to more than 90 percent after WWII and proceeded to focus on new projects to further improve the quality of their human capital, why did Türkiye experience such a delay? Why was 'quality' touted as the supposed reason behind that delay? Since other countries had various natural resources and Türkiye's primary resource has always been its human capital, did the authorities fail to predict that such a delay would be extremely costly? In truth, the answers to all these questions relate to the democratization of education that has taken place over the last twenty years. It is possible to argue that the debates over massification and the quality of education in Türkiye are not actually related to quality at all, but covertly serve another purpose. Put simply, the country appears to have intended to make access to education conditional, rather than unconditional, and implemented that plan through various engineering projects until the 2000s. The headscarf ban and the use of coefficients, which hindered access to education, were among the mechanisms of that design.

The relationship between education and cultural power/hegemony has been the subject of debate for a long time (Borg, Buttigieg & Mayo, 2011). In Türkiye, the difference between being in power and exercising cultural power come up frequently. An oft-ignored point, however, is that the path to cultural power goes through education and, accordingly, any obstacle that bars access to education is intended to stop cultural power from changing hands. First and foremost, the Turkish authorities made no special attempt to increase the schooling rate before 2002 in order to perpetuate their hold on the existing cultural

power. In other words, the massification of education was delayed, under the pretense of preserving quality, to prevent or delay the emergence of co-holders of cultural power and a shift in discourse. The use of coefficients, which aimed to push young people who could potentially access higher education away from the İmam Hatip schools, too, was directly related to cultural power. By taking that step, the authorities attempted to prevent individuals who would join the labor force and the civil service as college graduates from receiving religious instruction.

The use of coefficients against vocational education also created and worsened sociological division, as children born into socio-economically disadvantaged families were channeled into vocational training to limit their upward mobility and perpetuate their disadvantages (Özer & Perc, 2020). In this regard, as Bourdieu stresses, education was made to serve as a mechanism that promoted and sustained social stratification (Bourdieu, 1973).

It is a well-known fact that education systems lay the groundwork for the cultural and social capital of cultural power and, accordingly, ensure the reproduction and continuity of social classes (Bourdieu, 1990). It would be suitable to argue that, taken as a whole, each of the various steps that Türkiye has taken in education over the last two decades disrupted the cycle of reproduction established in previous decades, which had perpetuated the lack of equal opportunity and made the (dis)advantaged more and more (dis)advantaged. The steps taken between 2002-2022 constitute a rupture that resulted in the existing cultural powerholders' loss of their advantage. As such, the transformation that occurred in the field of education over the last twenty years not only improved the quality of Türkiye's human capital but also marked the beginning of a new cultural era.

DISCUSSION & RECOMMENDATIONS

The global trend towards the universalization of education started long before the 2000s, and many countries have already revised their education systems to expand their extent and coverage. These efforts towards revising systems serve three purposes: increasing the quality of education services, disseminating these services to diverse parts of society, and ensuring that all people can benefit equally from the expanded services. Improvements in these three dimensions form the basis of the holistic development of education systems.

The improvement and reforms in education systems increase the importance of monitoring the related outcomes. Therefore, standard criteria are needed to evaluate the developments in education systems from different perspectives and compare them with other systems (IES, 2015; Metsamuuronen, 2019). Educational indicators have been used for this purpose and to provide meaningful feedback to education policymakers for many years. Many countries use education indicators to analyze situations and evaluate the impact of education policies.

Large-scale projects have been initiated to increase the low schooling rates in Türkiye, long considered the most critical problem facing education nationwide, as well as to bolster the enrollment of female students and support socioeconomically disadvantaged students (Çelik, 2011; Polat, 2014). Simultaneously, structural changes were made in the education system, the compulsory education period was extended from 8 to 12 years, and diverse transition systems (e.g., high-stakes assessment systems) were implemented in the last decade.

This book examined the changes made over the last 20 years to education access, investments, and student achievement in Türkiye. For this purpose, national and international education

indicators were interpreted alongside official education statistics using a comparative approach.

The findings of this study revealed that the investments of the last 20 years have increased the schooling rates in upper-secondary education from 44% to 95% and nearly universalized access to upper-secondary education. Gaps in schooling rates between regions have also been significantly reduced. In 2000, the schooling rates increased in the provinces with historically low enrollment, reaching the same level as those in the provinces with the highest enrollment rates. One of the major improvements was achieved in the schooling rates of girls. The schooling gap between genders has decreased significantly in the last 10 years, and girls' schooling rates have even risen higher than boys' at certain levels. However, the preschool enrollment rates constituted an exception in this aspect, as they remain well below the averages of the OECD and diverse EU countries. Although significant progress has been made in Türkiye in the last 20 years, enrollment rates—particularly at the preschool level—remain essential for development. It is also important to note that the schooling rates in preschool, primary education and upper secondary education peaked in 2022 despite the recent challenges of the COVID-19 pandemic. The projects and steps for individual monitoring of students by MoNE contributed greatly to education access.

The national education budget is critical for improving education quality and supporting socioeconomically disadvantaged students while increasing access to education. The total budget allocated to MoNE and the budget allocated to educational investments are key indicators of sustainable improvement. The findings of this study showed that the total budget allocated to MoNE has grown approximately 40 times larger over the last 20 years, while the investment budget has increased tenfold. While

the budget per student was approximately 256 TL in 2000, it increased to 10,994 TL in 2022 despite the significant increase in the number of students. This finding is especially important as it shows that the MoNE budget allocated for each student has been boosted despite the record enrollments. Increases in both the total budget and investment budget indicate that additional resources have been allocated to the MoNE to improve educational processes. Although the significant increase in the total budget has also amplified the public education expenditures per student, this figure is still below the OECD average. The Turkish public education expenditure per student was about one-fifth of the OECD average in 2006 and a half in 2019. Therefore, continuing to increase the public budget allocated to education to reach the OECD average will be a critical step for increasing education performance and sustaining development in the future.

Improvements in increasing access and quality of education have also led to significant progress in ensuring equal educational opportunity. The gender gap in educational access and its associated indicators have decreased considerably over the past two decades, and the academic performance of females is currently higher than male students in many fields (MoNE, 2019, 2020, 2021). However, Turkish education has long faced an achievement gap between schools and regions, which still exists today. Along with large-scale international assessments, namely the PISA and TIMSS, these gaps are clearly seen in the national examinations within the scope of transition systems in Türkiye (Dinçer & Uysal Kolaçin, 2009; Suna & Özer, 2021; Yavuz et al., 2017). Related studies indicate that socioeconomic gaps and school tracking are factors that widen the achievement gap (Suna et al., 2020, 2020). These findings reveal the importance of providing additional support to socioeconomically disadvantaged students. Both the *Remedial Education Program in*

Primary Education (İYEP), *1000 Schools in Vocational Education and Training Project*, and *10,000 Schools in Primary Education Projects* are initiatives implemented by MoNE to support students with socioeconomic disadvantages who need academic support (Özer, 2021). These large-scale projects provide multi-dimensional support to students to alleviate the achievement gap. The *Summer School*, conducted for the first time in public schools in 2022, was also critical for coping with the impact of COVID-19 to improve the academic and social skills of students. Almost 1 million students received science and art trainings in the *Summer School* program in public schools in Türkiye.

Subsequently, MoNE has made significant investments in developing the quality of education while increasing access to education in the last 20 years. Given the current state, Türkiye needs policies designed to increase the equality of opportunity in education to ensure an effective and equitable education system. Therefore, current policies focus on improving schools and increasing capacity, providing accommodations for disadvantaged student populations, and promoting students' academic and social growth.

Along with all these developments, one of the main problems that educational policymakers should focus on is the achievement gap between schools. Although the achievement gap between schools is intensified at more advanced levels of education, its foundation is laid at the preschool and primary school levels. It has long been known that non-school factors directly affect students' academic outcomes; parental income and education level, home resources, and socioeconomic status significantly impact student achievement. Moreover, inequalities in access to pre-primary education create significant gaps in students' readiness at the beginning of primary school. When these gaps are not addressed at the primary school level, they gradually

increase and become apparent as vast disparities in achievement between schools.

Therefore, increasing access and promoting the universalization of preschool education is particularly critical. Guaranteed access to preschool education regardless of the socioeconomic background can significantly bolster equality of opportunity in Türkiye, thereby mitigating the achievement gap between schools. Steps taken in this direction have the potential to lead to holistic, long-term improvements in the Turkish education system and promote equal opportunity in education. Considering the positive effects of the *1,000 Schools in Vocational Education* project implemented by MoNE in recent years, there is clearly a need for additional innovative projects that focus on eliminating the gap in opportunities for other school types and education levels. In this perspective, the *10,000 Schools in Primary Education Project* has been conducted by MoNE. This project also contributed to improving school environments with multiple support for physical conditions, students, teachers, and parents. In this project, almost every one of the four schools in primary education in Türkiye is supported with a budget of 3 billion TL.

The new orientations in the Turkish education system also focus on lifelong learning. New projects and approaches were initiated to increase the extent of lifelong learning opportunities: the content of public education courses (PECs) was expanded, VTC skill development programs were initiated, and PECs were provided in Village Life Centers. The adults highly demanded these programs, and participation peaked in 2022. These programs show their potential to meet the significant need of Türkiye in adult education and lifelong learning.

MoNE attached special importance to the digitalization of education in its recent policies. Specific digital platforms were

established within the scope of *Mathematics, Turkish Language and Foreign language Campaigns*. Recent methods included using gamification, visual attachment, and storytelling to attract students' attention. Also, these platforms provided live-sessions for students, teachers and parents. Lastly, a new platform (ÖDS) for individualized learning was developed by MoNE, in which students can learn about their learning gaps and reach adequate resources as personal suggestions through the platform. These improvements increased MoNE's capacity for developing digital tools.

MoNE has spent a great effort to access Syrian children into education services. Syrian children of school age reached almost 1 million in 2022. Thus, MoNE has been implementing various projects both to promote access to education and social integration. Recently, new projects were initiated to facilitate the transition of Syrian students into the VET system, providing financial support and increasing school environment quality.

Finally, teacher characteristics are the most crucial factor in closing the achievement gap between schools and increasing the equality of opportunity in education. As the years of seniority of teachers employed nationwide increase, student achievement develops significantly, as demonstrated by the remarkable differences in Turkish students' performance in recent cycles of international assessments such as the PISA and TIMSS. In developed countries, the relationship between student achievement and teacher seniority is relatively weak; thus, future policies should seek to balance the distribution of senior teachers across Türkiye. In addition, comprehensive and multidimensional professional and personal development training programs are needed to target teachers, particularly those new to the profession. MoNE initiated the new approach of teacher trainings at the end of 2021. This approach increased participation in in-service trainings

prominently. The participation rates and the average hour of training per teacher peaked in 2022.

In this context, teachers should be encouraged to participate in additional development and training, especially postgraduate education. Teachers across Türkiye have already demonstrated a great willingness to complete postgraduate training. However, such ongoing education efforts should move beyond symbolic milestones to create real gains for teachers' personal rights. The Teachers' Professional Law, which was effectuated in 2022, led to major improvements in teachers' personal rights. The law defines teaching as a career path and appreciates teachers' experience and professional development.

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Bibliography

Prof. Dr. Mahmut ÖZER | Minister of National Education - Republic of Türkiye

Prof. Dr. Mahmut Özer has been working as the Minister of National Education since August 6, 2021. Özer served as the Deputy Minister at the Ministry of National Education between August 8, 2018, and August 5, 2021. Previously, Özer was assigned as the Rector of Zonguldak Bülent Ecevit University and served for two terms between November 28, 2010, and October 4, 2017. He worked as the President of the Interuniversity Board (ÜAK) between August 1, 2015, and August 1, 2016; and the Head of the Measurement, Selection and Placement Center (ÖSYM) between October 4, 2017, and August 8, 2018. Özer has produced numerous studies on complex systems, network science, education policies, vocational education and training, and higher education. Some of his recent books are as follows: *Türkiye'nin Mesleki Eğitim İle İmtihanı – Mesleki Eğitimde Paradigma Değişimi* (Türkiye's Challenge with Vocational Education – Paradigme Transitions in Vocational Training) (2020), *Eğitim Politikalarında Sistemik Uyum* (Systemic Harmonisation in Education Policies) (2021), *Eğitim Üzerine Söyleşiler* (Conversations on Education) (2021), *Türkiye'de Yükseköğretimde Büyüme ve Dönüşüm* (Growth and Transformation in Higher Education in Türkiye) (2021), *Türkiye'de Eğitimin Evrenselleşmesi* (Universalization of Education in Türkiye) (2022), *Türkiye'de Eğitimi Yeniden Düşünmek* (Rethinking Education in Türkiye) (2022).

The national and international data show that the Turkish education system has improved significantly in the last two decades. In this context, Türkiye has experienced a significant transformation since the 2000s to increase access to education and educational equality in opportunity. To achieve this, investments in education increased in parallel with the budget of the Ministry of National Education; thus, social support programs were implemented and spread throughout Türkiye. The universalization of education benefited relatively disadvantaged groups the most as a result of significant improvement efforts. Additionally, steps have been taken to increase inclusiveness in the education system: the coefficient regulation for university entrance and the headscarf ban was removed, and elective courses were diversified significantly. Therefore, this period is a critical phase for education's democratization and universalization.

Although the education system in Türkiye has been strengthened with great efforts and investments, the societal awareness of these improvements is not at the same level. Thus, this book aims to evaluate the developments in our education system in the last 20 years, to objectively evaluate the results of these improvements based on national and international data. This book will hopefully contribute to the development of new education policies that will alleviate the achievement gaps between schools and, thus, increase the equality of opportunity in Türkiye's education.