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# Overall Outlook of Education and Its Impact on the Economy in Turkey and OECD

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ABSTRACT	<b>Research Article</b>
As of today, education-based investments are among the basic components	
for determining the development level of countries and realizing their	
economic goals. Investments made for educational purposes are perceived	
as the main elements of growth due to their positive impacts on productivity,	
as well as providing individuals and society with benefits. Education	
expenditures directly affect the national income and production levels of the	
country, enhance the living standards, and stimulate factors such as	
knowledge and invention. The study aims to compare the importance and	
competence attached to education in Turkey with other OECD countries	
within the last decade. To this end, the educational statistics obtained from	
the OECD website were primarily utilized in the study, and then Turkey and	
OECD-member countries were compared in terms of education levels and	
expenditures. Upon evaluating the data obtained as a result of the study, it is	
seen that education expenditures are insufficient in Turkey, the importance	Presived: 05 04 2022
attached to education remains at quite a lower level compared to the OECD-	Revision received:
member countries, and Turkey's problems in the field of education have	20.05.2022
begun to become inveterate.	Accepted: 30.05.2022
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# Introduction

As of today, investments made in the fields of education, as well as research and development, are accepted as the main determinants of sustainable economic growth (Bozkurt, 2015, 45). Within the knowledge-based new world economic order, education and technological development have been gaining prominence day by day and are considered to be brought into the scope of capital. Thereby, the factors of production expand and attain a new dimension (Şimşek and Kadılar, 2010, 118).

The relationship between human capital and economic growth is a crucial matter of debate in the development economics literature. Within the scope of neoclassical growth theory, human capital theory reveals the importance of human capital on economic growth besides physical capital. Since the 1980s, in particular, debates on human capital have gained even more importance with the introduction of endogenous growth theories. Many studies exist in the literature investigating the relationship between human capital and economic growth. Among these, Schultz (1961), Denison (1962), Mankiw, Romer and Weil (1992) rank first place. Arrow (1962) developed a growth strategy based on learning-by-doing and asserted that the stock of knowledge accelerates production in the long-run. Lucas (1988) mentioned the increasing return of human capital and stated that economic growth would have been increased as human capital improved. According to Sala-i Martin (1990), the broadly described capital, including human capital, accelerates the growth rate in the long-run. Rebelo (1991) described human capital as a factor of production like physical capital. The results of empirical research studies indicate that human capital positively affects economic growth (Cheng and Hsu, 1997; Grammy and Assane, 1996; Barro, 1998).

The improvement of human capital due to the rise in education level accelerates economic growth by increasing capital investment rates and such a cyclical movement enhances human capital (Eggoh et al., 2015, 93; Çeştepe and Gençel, 2019, 140). The increase in human capital, which brings along the rise in qualified workforce, proliferates the economy and fosters the competitiveness of the country with the rest of the world. Individual-based investments through education boost the welfare level of the society and become one of the leading sources of economic growth. One of the main determinants of the wealth of nations involves the enhancement of human capital quality by improving the education quality (Wahab et al., 2018, 4).

Upon considering education with an egalitarian and public comprehension, it is effective in mitigating income inequality, generating new employment opportunities, realizing social reform, and ensuring technological progress, as well as economic development of a country (Taş and Yenilmez, 2008, 161). As the education levels of the individuals increase, they become more socialized and mature even faster (Arslan, 2004, 11). As the education level increases in a society, income level increases, fertility level decreases, democratization increases, social order stability is ensured, poverty and unemployment decrease, environmental awareness increases, crime rates decline, and social crimes and property crimes decrease (Türkmen, 2002, 56). Due to the economic, social, and sociological impacts of education, developed countries attach great importance to educational expenditures among other public expenditures.

Educational expenditures in Turkey, which is one of the developing countries, are soaring each year. Total educational expenditure has increased 3.5 times as of 2020 compared to 2011 (TURKSTAT, 2020). Nonetheless, various factors such as population density benefiting from education and educational inequalities among regions render it difficult to allocate sufficient resources to education. The budget prepared to be utilized in education for Turkey cannot fulfill the requirements and the available resources are not sufficient. In this context, higher importance should be attached to education, the share allocated to education out of the budget should be heightened, and more resources should be generated to raise individuals

who can become compliant with the information era, attain better quality, think better, analyze, question and have an entrepreneurial spirit in Turkey.

The aim of the study is to compare the importance and competence attached to education in Turkey with that in OECD countries within the last decade. For this purpose, the education statistics obtained from the OECD website are primarily used in the study, and then Turkey and OECD countries are compared in terms of education level and educational expenditures. Based on the data obtained in the conclusion part of the study, evaluations are made regarding the overview of education in Turkey. Upon considering that OECD countries incur a high level of expenditures on education, it is expected that the study would serve as a guidance for Turkey along with other countries, and it is anticipated that it would hearten the literature in terms of either existing or required improvements of the education system in Turkey. It is hoped that the study would also contribute to the steps to be taken to ensure equal opportunities for education in Turkey.

# Method

#### Model

In the study, the current status of the data on the basic indicators of education systems (education level, access to education, financial resources generated for education, teachers, learning environments, schools, etc.) is put forth in order to compare the importance and competence attached to education in Turkey within the last decade with OECD countries. Then, the concept of education and the overall impacts of education on the economy are included.

# **Data Collection Tools**

In the study, education statistics obtained from the OECD website are utilized in order to assess the general view of education in Turkey and OECD countries and its impacts on the economy. In order to make meaningful international comparisons, the data is tabulated and arranged in a way that may serve as guidance within the context of the educational system's needs in Turkey. While education indicators in Turkey and OECD countries are included, Turkey and OECD averages are considered.

#### **Data Collection and Analysis**

The basic education indicators and variables that allow countries to determine the extent to which they provide their students with quality education are considered in terms of the outputs of educational processes, access to education, financial resources generated for educational purposes and teachers, learning environments, and schools and analyzed in tables.

## Findings

In the light of the data obtained in the study, it is seen that the importance attached to education in Turkey is at quite a low level compared to other OECD countries, and it is noteworthy that the problems in the field of education in Turkey have begun to become chronic. Nevertheless, it is observed that education opportunities in Turkey are insufficient, no equal opportunity exists in education, and Turkey's competitiveness with OECD countries in education is at quite a low level. Turkey is far below the level of other OECD countries, especially in terms of access to education and financial resources allocated to education.

## **Educational Indicators in Turkey and OECD Countries**

The investment made by the countries for education is stated as the share of education in their budgets (UNESCO, 2009; Sülkü and Abdioğlu, 2014). Investments in education increase the level of literacy in society and the level of knowledge and skills acquired by individuals (Afşar, 2009). The least developed countries around the world are the ones that have been left far behind in terms of education indicators (Çalışkan et al., 2013). Investments in education are extremely crucial for underdeveloped and developed countries. It is clearly seen that highly industrialized countries continuously allocate more than 2% of their gross national product to educational and research expenditures, and achieve rapid growth (Korkmaz and Şahin, 2013).

	Tur	•key	OECD Average	
	2010	2020	2010	2020
Total Number of Secondary	58	41	20	15
School Non-graduates				
Secondary School Non-	64	43	18	13
graduate Women				
Secondary School Non-	52	39	21	16
graduate Men				
Total Number of Secondary	25	24	44	40
School or Upper Secondary				
School Graduates				
Total Number of Secondary	20	21	41	35
School or Upper Secondary				
School Graduate Women				
Secondary School or Upper	29	26	47	45
Secondary School Graduate				
Men				
Total Number of Higher	17	35	37	45
Education Graduates				
Higher Education Graduate	16	36	42	52
Women				
Higher Education Graduate	19	35	32	39
Men				

 Table 1. Education Levels of Individuals Aged 25-34 in Turkey and OECD Countries (%)

Source: OECD, (2021a).

Table 1 presents the data on the education levels of adults both in Turkey and OECD countries over the period 2010 - 2020. In most of the OECD countries, it is observed that quite a high proportion of individuals aged 25-34 have at least a secondary school degree. The OECD average rate of individuals who could not earn their secondary school degree as of 2020 is 15%. In Turkey, this rate is 41%, which is higher than the OECD average. Upon considering individuals aged 25-34 who have not graduated from secondary school in Turkey by gender, it is observed that the gender gap has decreased within the last decade, whereas the gap still exists. In Turkey, the rate of women aged 25-34 who do not have a secondary school degree as of 2020 is 43%; whereas the rate of men of the same age group is 39%. Regarding the OECD average, it is observed that the rate of men who do not have a secondary school degree (16%) is higher than the rate of women who do not have a secondary school degree (16%) is higher than the rate of women who do not have a secondary school degree (16%) is higher than the rate of women who do not have a secondary school degree (16%) is higher than the rate of women who do not have a secondary school degree (16%) is higher than the rate of women who do not have a secondary school degree (16%). In Turkey, the rate of individuals aged 25-34 who earned a higher education degree has doubled on average within the last decade, reaching 35%. Regarding the OECD average, this rate is 45%. Upon examining the rates of individuals with a higher education degree in Turkey for the year 2020, the womenmen ratios are observed to be at similar levels (OECD, 2021a).

	Associate	Undergraduate	Master's	Doctoral
Turkey	6.1	13.4	2.0	0.4
OECD Average	7.2	18.2	13.5	1.3

**Table 2.** The Rates of Individuals with Higher Education Degree Aged 25-34 in Turkey and OECD Countries (%)

Source: OECD, (2021a).

Considering Table 2, it is observed that the rates of individuals who completed their master's and doctoral education in Turkey as of 2019 were far lower than the OECD average. The rate of adults with a master's degree was 2% in Turkey, whereas the OECD average of this rate was 13.5%. While the rate of adults with a doctoral degree in Turkey was 0.4% as of 2019, it is seen that the OECD average of adults with a doctoral degree was 1.3%.

**Table 3.** Education and Employment of 18-24 Year-olds in Turkey and OECD Countries (%)

	In Education	Not in Education and	Unemployed	Inactive
		Employed		
Turkey	38	30	11	21
OECD	53	32	6	9
Average				

Source: OECD, (2021a).

As of 2020, the percentage of the young population with the ages range of 18-24 who quit education and start working was 32% in OECD countries, whereas this percentage was 30% in Turkey. Although it is seen in Table 3 that the youth unemployment rate in Turkey is 11%, it is also known that this rate is much higher. The youth unemployment rate in Turkey is well above the OECD average of 6%. It is observed that the rate of the young population in education in Turkey as of 2020 is 38%. This rate is far below the OECD average of 53%. In 2020, the level of the young population not working and not seeking a job in Turkey was 21%, and the OECD average for the same year was 9% (OECD, 2021a). This rate was especially high for women in Turkey, and the rate of women not involved in education and employment was approximately twice as much as that of men. This circumstance also indicates the gender inequality in favor of men in the labor market of Turkey.

**Table 4.** Employment Levels of 25-64 Year-olds by Educational Attainment in Turkey and OECD Countries (%)

	Turkey	OECD Average
Below Upper-Secondary School Graduates	50	58
Upper-Secondary or Post-Secondary School Graduates	60	75
Higher Education Graduates	74	84
All Levels of Education	57	76

Source: OECD, (2021a).

As of 2020, employment rates for the 25-64 age group in Turkey were 50% for those who have not graduated from secondary school, 60% for those who have graduated from presecondary or post-secondary schools, and 74% for those who have graduated from higher education institutions. The OECD average for the same categories was 58%, 75%, and 84%, respectively; and it is seen from the table that the employment level increases as the education level increases. Turkey is among the OECD countries in which the employment level of the population aged 25-64 with higher education degree is minimum. Upon evaluating the same

age group in terms of total employment by the entire education levels, Turkey is determined as the OECD-member country with the lowest percentage of 57%, whereas the OECD average is 76% (OECD, 2021a).

**Table 5.** *Employment Rates of 25-34 Year-olds with Higher Education, by Levels of Higher Education in Turkey (%)* 

	Associate	Undergraduate	Master's	Doctoral
Turkey	66	74	84	84
OECD Average	84	83	87	90

Source: OECD, (2019).

According to Table 5, the employment rate of adults who earned an associate degree in Turkey as of 2018 was 66%. The employment level of adults with a bachelor's degree was 74%, the employment level of adults with a master's degree was 84%, and the employment level of adults with a doctoral degree was 84%. Upon considering the OECD average, it is seen that the employment rate for individuals with an associate degree was 84%, the employment rate for individuals with an undergraduate degree was 83%, the employment rate for individuals with a graduate degree was 87%, and the employment rate for individuals with a doctoral degree was 90%. It is observed that Turkey fell below the OECD average in terms of employment rates according to higher education degrees.

**Table 6.** Private Costs and Benefits of Higher Education in Turkey

	Private Cost (USD, PPP)		Private Benefit (USD, PPP)		Benefit/Cost Ratio	
	Women	Men	Women	Men	Women	Men
Turkey	-7,500	-13,200	180,500	174,600	24.1	13.2
OECD Average	-40,000	-52,900	266,800	340,100	6.7	6.4

Source: OECD, (2021a).

Table 6 presents the private costs and benefits of higher education in US dollars modified according to purchasing power parity in 2018. The private education costs of men and women at the higher education level in Turkey were lower; whereas the benefits were higher compared to the OECD average. While the average private benefits were 6.5 times higher than the private costs of higher education for men and women in the OECD average, this level was 24.1 for women and 13.2 for men in Turkey (OECD, 2019).

In OECD countries, the benefit of graduating from a higher education institution was lower for women than for men. In Turkey, it was quite the opposite. It is thought that higher employment and wage gaps for women between higher education graduates and high school graduates account for this situation. Providing more educational opportunities for women in Turkey would result in more affirmative outcomes in terms of employment and wages compared to men (OECD, 2021b).

15-19 20-24 25-29 30-39 6-14 40-64 100 Turkey 69 51 32 16 3 99 **OECD** Average 84 41 16 6 2

**Table 7.** School Enrollment Rates by Age Groups in Turkey (%)

Source: OECD, (2021a).

According to Table 7, in Turkey as of 2019, the school enrollment rate of individuals aged 6-14 was 100%, the enrollment rate of the youth aged 15-19 was 69%, and the enrollment

rate of the young individuals aged 20-24 was 51%, and the enrollment rate of the individuals aged 25-29 age was 32%, the enrollment rate of the individuals aged 30-39 was 16%, and the enrollment rate of the individuals aged 40-64 was 3%. It is observed that the school enrollment rate of adults especially within the age range of 15-19 in Turkey was well below the OECD average of 84%, and with this rate, Turkey was the OECD-member country with the lowest school enrollment rate. In this context, it is seen that significant problems arose regarding access to education in Turkey (OECD, 2019).

Years	Turkey	OECD Average
2005	10	72
2015	31	81
2019	39	83

**Table 8.** School Enrollment Rates of 3-5 Year-olds in Turkey (%)

Source: OECD, (2021a).

In Table 8, the school enrollment rates of 3-5 year-olds in Turkey are presented over the period 2005-2019. Although the level of school enrollment rate of 3-5 year-olds was 10% as of 2005 in Turkey, this rate increased to 31% in 2015, and 39% in 2019. Nonetheless, this rate was considerably lower than the OECD average. It is seen that Turkey was the country with the lowest schooling enrollment level of 3-5 year-olds among OECD countries. According to the OECD average, one in three children under the age of three attends early childhood education and care services. In Turkey, however, merely three out of every 1,000 children under the age of three benefit from these services (OECD, 2021a).

Programs	Turkey	OECD Average
Engineering,	29	34
manufacturing		
and construction		
Health sciences	26	12
Management,	16	18
administration,		
and law		
Services sector	8	17

**Table 9.** Ratios of Upper Secondary Graduates from Vocational Programs (%)

Source: OECD, (2019).

While the rate of individuals who were expected to graduate from vocational secondary schools in Turkey as of 2010 was 54%, in 2017 this rate appeared as 75% which is the largest increase among OECD countries. Nevertheless, it is seen that the percentage of individuals who were expected to graduate as of 2017 in Turkey according to the programs was below the OECD average, except for the health sciences program. While the average age for graduating from vocational secondary education was 22 regarding the OECD average, it was 18 in Turkey. The fact that vocational education has not been available in schools that do not have higher education following secondary education, as in OECD countries, accounts for the emergence of this result in Turkey (OECD, 2019). This situation negatively affects both the quality and quantity of education in Turkey and reduces the quality of education.

	From Elementary to Higher Education	Elementary School	Secondary School	High School	Higher Education
Turkey	5,723	3,945	4,064	6,043	10,008
OECD	11,680	9,550	11,091	11,590	17,065
Average					

**Table 10.** Total Expenditure on Educational Institutions per Student by the Level of Education(USD)

Source: OECD, (2021a).

Table 10 indicates that the total expenditures per student in educational institutions are below the OECD average. While the OECD average of educational expenditures from elementary school to higher education as of 2020 was USD 11,680, this value was USD 5,723 in Turkey. It is seen that the expenditures per student in elementary, secondary, high school, and higher education institutions in Turkey were USD 3,945; USD 4,064; USD 6,043; and USD 10,008, respectively. It is noteworthy that the OECD averages for the same levels were USD 11,680; USD 9,550; USD 11,091; USD 11,590; and USD 17,065, respectively. Since the expenditures per student represent a human capital investment in a sense, these expenditures are considered serious indicators in terms of comparing Turkey and other OECD-member countries.

**Table 11.** Total Expenditure on Educational Institutions per Student Relative to GDP Per Capita (%)

	From Elementary to Higher Education	Elementary School	Secondary School	High School	Higher Education
Turkey	20	14	14	21	35
OECD Average	26	21	24	25	37

Source: OECD, (2021a).

According to Table 11, the ratio of expenditure per student to GDP per capita was 20% as of 2018 in Turkey's educational institutions from elementary to higher education, whereas the OECD average was 26%. It is seen that the share of expenditures per student in GDP per capita of Turkey was 14% for elementary and secondary school levels, 21% for high school level, and 35% for higher education levels. It is observed that the shares of expenditures per student in GDP per capita of Turkey, especially at elementary and secondary school levels, were far below the OECD averages. Although higher education involves the educational level on which the highest expenditures are made in Turkey, it falls below the OECD average in terms of the share of expenditures per student in GDP per capita.

**Table 12.** Total Expenditure on Educational Institutions per Student by the Type of Institution(USD)

	From Elementary to	Higher Education	All Higher Education		
	<b>Public Institutions</b>	Private	Public	Private	
		Institutions	Institutions	Institutions	
Turkey	4,740	16,237	9,557	16,025	
OECD	10,374	10,812	16,070	11,868	
Average					

Source: OECD, (2019).

In 2016, the expenditures per student in public institutions from elementary to higher education in Turkey was USD 4,740; whereas the OECD average was USD 10,374. In Turkey, the expenditures per student in private institutions from elementary to higher education was USD 16,237, whereas the OECD average was USD 10,812. In Turkey, the expenditures per student on private institutions were approximately 3.5 times as much as the expenditures per student on public institutions, which is the maximum rate in all other OECD countries (OECD, 2019). While the total amount of expenditure made by public institutions per student in higher education was USD 9,557 in Turkey, the OECD average was USD 16,025 in Turkey, whereas the OECD average was USD 11,868 (Table 12).

Tuble Let 2 ist is within of Teachers of Develop Balleanon and Tige Groups (70)									
	Elementary			Lower Secondary			Upper Secondary		
	Below 30	30- 49	50 Year Old and	Below 30	30- 49	50 Year Old and	Below 30	30-49 Year	50 Year Old and
	Year	Year	Above	Year	Year	Above	Year	Old	Above
	Old	Old		Old	Old		Old		
Turkey	17	62	21	23	70	7	15	69	16
OECD	12	55	33	11	53	36	8	52	40
Average									

**Table 13.** Distribution of Teachers by Level of Education and Age Groups (%)

Source: OECD, (2021).

According to Table 13, teachers at different education levels in Turkey and the OECD average as of 2019 are predominantly within the age range of 30-49. Compared to the OECD average, the ratio of teachers under 30 years of age was high, whereas the ratio of teachers over 50 years of age was low in Turkey. In Turkey, the ratios of teachers aged 50 and older at elementary, lower secondary, and upper secondary school levels were 21%; 7%; and 16%, respectively. The OECD averages of teachers aged 50 and older at elementary, lower secondary, and upper secondary education levels were 33%; 36%; and 40%, respectively. In Turkey, 18% of teachers were under 30 years of age, 67% were within the age range of 30-49, and 15% were 50 and older (OECD, 2021).

# **Impacts of Education on the Economy**

Education is one of the various different variables that affect the economy, especially economic growth. It is well-known that the foundation of development in the new world order is the production of knowledge, and countries that invest in knowledge are rapidly developing. Since education is one of the most crucial elements of human capital, it enhances the quality of the workforce and fosters economic growth. Therefore, the expansion of educational opportunities directly affects the quality of the workforce.

As the education level of the society increases, the quality of life and welfare level also increases, competitiveness improves, productivity flourishes, and entrepreneurship and income equality also gain momentum (Saygili et al., 2005). The first and the most important of the positive impacts of education on economic growth is formal education, which comprises elementary and secondary education. Because, besides its increasing effect on the literacy rate, formal education also has a positive impact on the behavior and thoughts of individuals. Moreover, in-service training and learning-by-doing comprise the second positive impact of education on economic growth. Guidance, information, awareness-raising, and teaching phenomena that are present in education and training activities require a planned effort. Therefore, all world countries tend to allocate large portions of their national incomes to education (Doğrul, 2009).

Turkey needs to enhance its educational expenditures in order to achieve the long-term economic growth. Turkey is far below the average of OECD countries in terms of educational expenditures. Factors such as population density, interregional inequalities, national income level, income inequality, insufficient resources, high public deficits, low level of public revenues, and the importance attached to education by the rulers of the country are effective in the emergence of such a result. Due to the fact that education expenditures in Turkey are far lower than that of OECD countries, individuals cannot benefit from education opportunities fairly and this situation leads to inequality in education and increases the level of poverty. Upon considering the importance of qualified human capital in the realization of growth and development, this situation becomes even more serious. Upon considering that the most crucial policy to regulate income distribution in Turkey, in which income inequality is at quite a high level, is equality of opportunity in education, implementing economic policies to ensure this becomes necessary. The absence or inadequacy of the schools' budgets and the high extrabudgetary expenditures in Turkey make it even more difficult to obtain reliable data on education expenditures (Arabacı, 2011).

Investments for individuals through education foster productivity, improve the level of national income per capita, and accelerate economic development. The outcomes of qualified education affect not merely the individual, but also the entire society. Depending on the increase in education level, crime rates and suicidal tendencies decline, and society improves both economically and culturally. As the level of education increases, healthier individuals are raised, labor productivity increases, and living standards are enhanced. It also accelerates education, science, and technology, and enhances the competitiveness of the country with the outside world. The first and the most important step of development in the globalizing world involves the presentation of a fair education policy. A fair education system not only boosts the literacy rate in the society but also paves the way for the development of creative, sociable, free-spirited, global-minded individuals who are pervious to change. The concept of development is integrated with the notions such as sustainability and human development and is associated with education in the new world order. In this regard, education is also a crucial instrument in realizing other development goals.

#### **Discussion and Conclusion**

Turkey is in the position of a developing country that has exhibited progress in education data within recent years and strived to allocate sufficient budget share to education to render sustainable education possible. Notwithstanding, the below-average results in the data assessing the outputs of educational activities indicate that Turkey lags behind OECD countries. Therefore, there is a need for accentuating public and private resources, and policies concentrating on the utilization of private resources should be implemented, especially in higher education. Besides, a detailed plan should be prepared and appropriate resource allocation should be provided to reform education and improve the quality of the education system.

The ratio of older teachers in Turkey is far below the OECD average. It is predicted that young teachers being intense in the education system would enhance the quality of education due to their motivation and updated knowledge. On the other hand, young teachers should be subjected to vocational training in order to reinforce their experiences. The need for renewal in the field of education is moving up rapidly in the globalizing world where technological developments are also increasing rapidly. In this context, education and training programs should not fall behind the changing world order. The fact that various different problems exist in the education system of Turkey, such as inequality of opportunity in education, the quality of education, the teacher appointment system, the share allocated out of the professional development budget to education, the inadequacy of the number of schools and classrooms,

reveals that the education system is quite backward not only quantitatively, but also qualitatively. For instance, the results of the Program for International Student Assessment (PISA) conducted to increase the level of education among OECD-member countries indicate that students belonging to the 15-year-old group in Turkey fall far behind the OECD average in terms of utilizing the equipment and skills they have acquired at school in their daily lives. On the other hand, it is noteworthy that the number of the private sector and private schools in education is increasing today. The interest in and demand for private schools are increasing day by day. The quality of the staff they employ, the working environment, the quality of the education they provide and the small classroom sizes render private schools more advantageous than public schools. This situation reflects the quality of the Turkish education system. In order to mitigate these existing problems, the education system should be implemented on sound foundations, and education reform should be carried out for all education levels, public education expenditures should be made more effectively, fairly, and efficiently, and the quality of education should be improved.

Consequently, in the rapidly globalizing world, besides the national assessment activities carried out in the field of education, educational data are needed to determine Turkey's position at the international level. Therefore, it is obligatory to determine the education level of Turkey according to certain reference points, complete the missing parts, and take the necessary measures. In this sense, it is thought that the results of the study would act as a guide for other researchers to achieve quality education with the outputs of educational processes in Turkey, access to education, and financial resources generated for education. The education system in Turkey should be organized in accordance with international education standards and should be taken for teacher training and employment, the education system should be made, and Turkey's competitiveness with OECD countries should be improved in terms of education.

## Suggestions

It is anticipated that the findings obtained as a result of the study would enable academicians conducting research studies on the subject to make inferences regarding the steps taken in Turkey and OECD countries in order to achieve fair and qualified education in terms of outputs of educational processes, access to education, financial resources allocated to education and learning environments. The study also serves as a guide in terms of the needs and deficiencies of the education system in Turkey.

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