



A New Step Towards Narrowing the Achievement Gap in Turkey: “1,000 Schools in Vocational Education and Training” Project

Mahmut Özer^{a*}

^a Prof. Dr., Ministry of National Education, Ankara/Turkey, (<http://orcid.org/0000-0001-8722-8670>) * mahmutozer2002@yahoo.com

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ABSTRACT

Systematic steps have been taken to improve the quality of vocational education and training (VET) in Turkey after the publication of the country's Education Vision 2023 document, resulting in short-term positive outcomes. These actions expanded the scope and scale of the collaborations with these sectors, as well as establishing a quality assurance system in VET. Additionally, the greater proportion of on-the-job training programs established through these reforms have increased students' skill development. Research and development centers focusing on intellectual property were established as centers of excellence in VET, and patent, utility model, design, and trademark productions and registration processes were also prioritized during this period. At this point, the Ministry of National Education (MoNE) has taken a new step to improve the quality of VET and alleviate the achievement gap by starting the “1,000 Schools in Vocational Education and Training” Project. The present study introduces this project and discusses its aims and scope in detail. The project implements a holistic approach towards narrowing the achievement gap, aiming to improve the infrastructure and educational environments of VET schools through considerable investments in school development, as well as building teachers and executive leaders' capacities. Additionally, students' educational and personal development will be supported in a multifaceted way to compensate for deficiencies in basic skills. Parents will also be supported through planned lifelong learning mechanisms. When the initial project has been completed after one year, the improvement in VET will be scaled up to expand to all schools in Turkey. Ideally, the 1,000 Schools Project will help to narrow the achievement gap between high schools in Turkey.

Keywords: Education vision 2023, vocational education and training, basic skills, achievement gap, equality in education

Türkiye’de okullar arası başarı farklarını azaltmaya yönelik yeni bir adım: “Mesleki ve Teknik Eğitimde 1.000 Okul projesi”

Öz

Türkiye’de 2023 Eğitim Vizyonu sonrasında mesleki eğitimde kaliteyi artırmaya yönelik sistematik adımlar atılmış ve kısa sürede sonuçları alınmaya başlanmıştır. Sektörlerle kurulan iş birliklerinin kapsamı ve ölçüğü genişletilmiş ve kalite güvence sistemi kurulmuştur. Mesleki eğitimde işletmelerde beceri eğitimi güçlendirilmiş ve uygulamalı eğitime ağırlık verilmiştir. Mesleki eğitimde mükemmeliyet merkezleri olarak kurulan AR-GE merkezlerinde fikri mülkiyet çalışmaları odağa alınmış ve bu kapsamda patent, faydalı model, tasarım ve marka üretim ve tescil sürecine ağırlık verilmiştir. Milli Eğitim Bakanlığı mesleki eğitimde kaliteyi yaygınlaştırmak ve okullar arası başarı farkını azaltmak için yeni bir adım atarak ‘Mesleki Eğitimde 1.000 Okul Projesi’ni başlatmıştır. Bu çalışmada bu proje tanıtılmakta ve proje kapsamında atılacak adımlara değinilmektedir. Proje kapsamında mesleki eğitimde seçilen okulların altyapısı ve eğitim-öğretim ortamları iyileştirilecek ve zenginleştirilecektir. Diğer taraftan öğrencilere yönelik temel beceri eksikliklerini telafi etmeye yönelik eğitim desteği ve kişisel gelişim destekleri verilecektir. Ayrıca öğrencilerin velilerine yönelik hayat boyu öğrenme kapsamında eğitim desteği verilecektir. Süresi bir yıl olarak belirlenen proje başarılı bir şekilde tamamlandığında Türkiye’de mesleki eğitimde yaşanan iyileşme tüm okullara yayılmış ve toplam bir iyileşme sağlanmış olacaktır. Ayrıca, mesleki ve teknik Anadolu liseleri ile diğer lise türleri arasındaki başarı farkları da azalacaktır.

Anahtar kelimeler: 2023 eğitim vizyonu, mesleki ve teknik eğitim, temel beceriler, okullar arası başarı farkı, eğitimde eşitlik

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1 | INTRODUCTION

Countries attach great importance to vocational education and training (VET) for meeting the human resource needs of their labor markets. Many countries have seen reforms in their VET systems to make these institutions compatible with the transformations in labor markets (Coenen et al., 2015; Fuller, 2015; Hanushek et al., 2017; Özer & Perc, 2020; Rözer & Werfhorst, 2020; Sahlberg, 2007; Shavit & Müller, 2000). The main purpose of such revisions in VET is to support students with skills that can easily be adapted to the dynamic demands of the labor market. Therefore, VET systems are restructured to train students with broader general “soft” cognitive and social skills, as well as vocational skills (Özer, 2020a). Such reforms ease graduates’ school-to-work transition and decrease youth unemployment rates (Allmendinger, 1998; Bol et al., 2019; Breen, 2005; DiPrete et al., 2017; Muja et al., 2019a, 2019b).

In recent years, the expansion and growing accessibility of higher education has increased students’ demands for higher education. Moreover, the fact that higher education graduates have better employment opportunities and access to prestigious professions fuels this demand (Korber, 2019). Therefore, students tend to prefer forms of secondary education that facilitate their transition to higher education. Consequently, high schools with academic programs, rather than vocational or alternative modes, are preferred more by students. In the long term, this trend restricts the student transition to VET in most countries, and VET high schools are at risk of becoming remedial institutions where relatively low-performing students are grouped (EQAVET, 2015). Even countries with traditionally strong VET systems, such as Germany, are affected by this inclination (Deissinger, 2015; Özer, 2020a; Solga et al., 2014). On the one hand, VET shoulders the responsibility of rapidly transforming the skills it cultivates in students, based on the widespread proliferation of automation and artificial intelligence in the production and service sectors; but on the other hand, it also bears the responsibility of helping students with deficiencies in basic social and academic skills to adapt to new conditions (Acemoğlu & Restrepo, 2018; Özer & Perc, 2020; Perc et al., 2019).

Turkey is experiencing similar trends and faces nearly the same problems with its VET system as other countries. Relatively high-performing Turkish students tend to select high school types that facilitate their access to higher education. While this inclination already creates critical challenges for VET, additional interventions intensified these challenges in Turkey. The coefficient regulation, introduced in the Turkish university entrance exam by the Council of Higher Education in 1999, restricted the transition of VET graduates to higher education from 1999 to 2012, thus reducing the number of high-performing students choosing VET (Özer, 2020b). This regulation, which was applied for more than ten years, negatively impacted VET and thus the labor market. Due to the regulation, high performing students who wished to enroll in VET ended up changing their preferences towards high schools with academic programs, due to the potential disadvantages that VET could pose when transitioning to higher education. After this policy ended in 2012, VET experienced a second impediment without sufficient time to recover from the coefficient regulation. This new intervention, the Transition from Primary to Secondary Education (TEOG) system, placed all students into high schools based on a central test score, which led the widespread tracking of low performing students into VET high schools (Bozgeyikli, 2019). Both of these interventions increased the flow of low performing students into VET and created a more disadvantageous environment in VET schools. The negative consequences of these interventions were not limited to the VET system, however: they also affected other components of the Turkish education system. These practices led to an increase in the achievement gap and thus inequalities in education (Bölükbaşı & Gür, 2020). Consequently, PISA results show that VET high schools are the school type most negatively affected by achievement gaps across Turkey (Cingöz & Gür; 2020; Suna et al., 2020a; Suna, Tanberkan, & Özer, 2020).

The Turkish Ministry of National Education (MoNE) has made great efforts to improve the VET system in recent years. Solid steps taken by MoNE, especially after the Education Vision 2023 announced at the end of 2018, have quickly alleviated many problems in VET (Özer, 2018, 2019a, 2019b, 2020c; Özer & Suna, 2019, 2020). The VET curriculum has been revised in all vocational areas in collaboration with select

economic sectors and aligned with national vocational standards. The MoNE also established a quality assurance system for VET with contributions from various sector representatives. In addition, the fields and branches of VET were simplified based on demands of the labor market, and additional attention was paid to the weight of general skills when designing the new curricula. Digital literacy skills were also emphasized in the new programs and curricula, to bolster students’ ability to adapt to technological developments (Canbal et al., 2020). Broader collaborations between the MoNE and various sectors of industry has improved students’ attitudes towards VET, and the number of students who enrolled in VET programs between 2018 and 2020 increased by 63%. Moreover, the enrollment rates of VET high schools based on their central test scores have increased, and the minimum scores for enrollment in these high schools have also increased dramatically (Özer, 2020b). For the first time in a long while, a significant proportion of high performing students have indicated a preference for VET high schools. This is an important indicator of the recovery of the VET system from the negative impacts of both the coefficient regulation and TEOG policies.

These improvements in VET stemming from the Education Vision 2023 have also buoyed the performance of VET schools during the COVID-19 pandemic. Almost all of the products needed across Turkey during the pandemic period (e.g., personal protective equipment, disinfectants, etc.) were produced by VET high schools (Özer, 2020d, 2020e, 2020f; Özer & Suna, 2020). In this context, diverse products from disinfectant to masks, to protective face shields to ventilators were produced and delivered to people in need, through the labor of VET students and graduates.

The performance of VET high schools has not only positively affected individuals’ attitudes towards VET; it has also led to an increase in the self-confidence of VET students and teachers after a long-period of being perceived as less important. In addition, the positive outcomes of broader collaborations with industry sectors for the last two years have increased employers’ confidence in their cooperation with the MoNE, and the mutual trust developed between education and industry has enabled the development of new projects.

One of the most persistent and critical problems faced by the Turkish educational system is the achievement gap. The MoNE has designed and provided several support programs to mitigate the adverse effects of this gap over the years. Turkey considers the issue a multifaceted problem and therefore supports narrowing the gap through a holistic approach. For example, support programs such as the “Remedial Education & Support Programme in Primary Education” (İYEP) and Supporting and Training Courses (DYK) aim to compensate for students’ deficiencies in academic and basic skills. On the other hand, policies for closing the achievement gap in Turkey not only focus on differences in academic achievement—they also consider the social and economic support of students. In this context, support policies such as special education programs, free distribution of textbooks, transportation of students to schools, free-food support, hostel and scholarship support, and conditional education support have been implemented regularly for many years. Since VET is the education type most negatively affected by the achievement gap, the MoNE developed a new project focusing on alleviation of the achievement gap in VET. This study discusses in detail the aim and scope of this project, called “1,000 Schools in Vocational Education and Training.” In addition, the effects of this project on the quality of VET and its contribution to the alleviation of the achievement gap are addressed.

Although its scope is smaller, the 1,000 Schools Project shares some characteristics with similar sweeping international initiatives and policies, such as the No Child Left Behind Law (USDE, 2002), which was implemented in the United States between 2001–2015 and prioritized supporting disadvantaged students; the education support of the Hamilton Project, implemented in the United States since 2006 (Ander et al., 2016); support projects in the UK with a total budget of 28 million pounds, combining the resources of governmental and non-governmental organizations to support the education and training of young people (UK Department of Education, 2018); and the Rutland Street Project, which has supported

early preschool interventions in Ireland since the 1960s (Educational Research Center, 1998). In this context, the current project aims to alleviate the achievement gap by supporting disadvantaged students and providing them equal opportunities in education.

PROJECTS TO NARROW THE ACHIEVEMENT GAP

The achievement gap between schools in Turkey is one of the largest issues contributing to educational inequality across the country. This achievement gap may originate from both structural problems inherent in the education system and non-school factors linked to demographics (Özer, 2020g). Socioeconomic status in particular becomes a key determinant of students' academic achievement in primary education. For example, differences in students' socioeconomic level explained 9% of the variation in PISA 2015 scores in Turkey (MoNE, 2016), and this rate increased to 11% in the PISA 2018 data (OECD, 2019). Many studies have been conducted on the effect of students' socioeconomic status on academic achievement in Turkey (e.g., Arslanargun et al, 2016; Coşkun & Ünal, 2006; Dinçer & Uysal-Kolaşın, 2009; Güllüpinar & İnce, 2014; Oral & McGivney, 2014; Özkan, 2010; Suna et al., 2020b). These studies widely demonstrate that students' socioeconomic levels have a significant effect on their academic achievement.

School tracking is the primary mechanism behind the achievement gap, which begins in primary education in Turkey and becomes stronger at the high school level (Bölükbaşı & Gür, 2020; Suna et al., 2020a). In particular the TEOG system, which placed all students into high schools based on their test scores, contributed to the achievement gap between school types more than other transition systems used in Turkey (Suna et al., 2020b). Since the relationship between students' TEOG scores and their socioeconomic status is very strong (as with many other standardized tests), students are latently clustered into high school types based on their socioeconomic levels. The tracking of students into school types based on their socioeconomic status also has important implications on educational activities and environments. Many studies in other countries have shown that teachers' expectations of students vary according to achievement levels (e.g., Oakes, 1990). Therefore, school types where disadvantaged students are clustered are negatively affected by school tracking, and they become even more disadvantageous due to teachers' low expectations of students and the corresponding negative learning environment that is created.

A new study by Cingöz and Gür (2020) shows that differences in socioeconomic level explain 38% of the variation in TEOG scores; a result indicating that socioeconomic level is a critical determinant in placement of students to high schools in TEOG system. Additionally, results show that the vast majority of students with the highest test scores in science high schools are also from the highest socioeconomic levels. On the other side, more than half of the students with lower exam scores in VET high schools are from lower socioeconomic levels. These findings on exam scores and high school types is also consistent with the results of a new study by Suna et al. (2020b). In 2018, the TEOG system was terminated and a new placement system was introduced: the LGS system. In the LGS system, only about 10% of the students transitioning into high schools in any given year are placed based on their central test score, while the other 90% are placed in high schools based on their geographic location and performance in middle school.

For many years, the MoNE has undertaken different projects to attempt to narrow the achievement gap between schools. The "Remedial Education & Support Programme in Primary Education" (İYEP) has been implemented successfully to support students with basic skill deficiencies in primary schools (Gençoğlu, 2019). Additionally, Supporting and Training Courses (DYK) continue to be offered throughout the country to support students through extra classes in middle and secondary schools. In this context, the "1,000 Schools in Vocational Education and Training" Project introduced in this study is the largest-scale project undertaken by the MoNE to close the achievement gap.

The MoNE established the "Department of National Monitoring and Assessment" (DNMA) in 2019 to increase the quality and equity of national education, as well as to monitor and alleviate the achievement

gap at both the primary and secondary level. The DNMA monitors components of the education system, as well as conducting data-based research and sharing the findings with relevant departments. The department also monitors the improvements resulting from policy changes and steps taken by the Ministry. In keeping with these goals, the DNMA has designed large-scale studies to monitor student achievement on a national level. The first research of this kind was undertaken in 2019, involving a monitoring study of student achievement conducted in 81 provinces across Turkey to assess 350,000 students in the 4th, 7th, and 10th grades at 2,865 schools (MoNE, 2019a). Also in 2019, the DNMA began an assessment study to evaluate students’ four key skills in the Turkish language: reading, writing, speaking, and listening (MoNE, 2019b). Finally, the department has also conducted a monitoring study of 5th to 12th grade student achievement in Turkish, mathematics, science, and foreign language courses, collecting data at the end of each semester for students who participate in DYK courses. These studies performed by the DNMA examine the reasons behind the achievement gap and support the development of data-driven interventions to alleviate these disparities.

SCOPE AND GOALS OF THE PROJECT

In Turkey, VET is structured as a four-year education program at the high school level and offered to students through two different options. In the first option, VET is mainly undertaken in schools, particularly vocational and technical Anatolian high schools (VTAH), and while some skill training takes place in companies. In the second option (Vocational Training Center, or VTC), VET is provided at the school one day a week, while skill training takes place in companies on the other days. Traditional apprenticeship, journeyman, and mastership trainings are also offered in VTCs. Currently, the VET institutions in Turkey are comprised of 3,259 VTAHs and 332 VTCs. Approximately 1.5 million students are enrolled in these 3,591 VET institutions, and these students account for approximately 36% of the students enrolled in secondary education nationally. VET is mainly provided through VTAHs, with only 8% of the total VET students enrolled in VTCs.

Within the scope of “1,000 Schools in Vocational Education and Training” Project, 1,000 schools were selected from the national total of 3,259 VTAHs based on pre-defined criteria, including rates of absenteeism, disciplinary problems, academic achievement, grade repetition, and school drop-out rates. Approximately 600,000 students are enrolled in these 1,000 selected schools. The general aim of the project is to extend the improvements implemented by the MoNE in recent years to all VET high schools, and to increase the overall quality of VET across Turkey. Since vocational training is the most disadvantageous type of education in terms of the achievement gap, the project aims to close this gap by providing support to the most disadvantaged VET schools. The estimated duration of the project is one year, with a required budget allocated accordingly.

This project aims to support administrators and teachers, to improve the educational environment in VET schools, and to support students to compensate for their deficiencies in basic skills and personal development. In addition, educational support will be provided to students’ parents within the scope of lifelong learning. In this context, the project aims to support all stakeholders in VET—including students, teachers, and students’ families in the selected schools—simultaneously with various resources. Therefore, this initiative focuses on generating holistic improvements in both the in-school and out-of-school factors affecting the achievement of the schools selected, using the following strategies:

Supporting Administrators and Teachers: The project aims to organize trainings for the administrators and teachers at the selected schools within the scope of the program’s goals. For this purpose:

- a) Trainings will be organized for all schools in order to increase awareness of the project, and inform the administrators and teachers in the schools about the scope of the project.

- b) Personal development and leadership trainings will be organized for school administrators.
- c) Trainings to increase the efficiency of the project will be organized for all teachers in the schools.
- d) All vocational teachers in the schools will be provided with on-the-job and professional development training during the project period.

IMPROVING EDUCATIONAL ENVIRONMENTS: The project aims to improve the educational environments of the selected schools. For this purpose:

- a) Maintenance and repair of the schools will be prioritized.
- b) A library will be structured in each school, and these libraries will be enriched with information and communication technologies (ICT).
- c) At least one new laboratory will be established in each school.
- d) Current laboratories in the schools will be updated with modern equipment and resources.
- e) Production capacity of the schools will be increased through revolving funds. As a result of this increased production capacity, students in the schools will be able to receive wages up to the minimum wage in proportion to their contribution to production, and teachers can also receive additional compensation up to twice the minimum wage.
- f) At least one new design and skills studio will be established in these schools within the scope of the "Design and Skills Studio Project in Schools" started by the MoNE after the publication of the Education Vision 2023.
- g) Each school will be supplied with at least two smart boards.

BASIC SKILLS EDUCATION SUPPORT: VET students have critical deficiencies in their basic skills originating from primary education, which need to be remedied. Higher levels of deficiency in this area have been observed in the VET schools selected for this project; thus, the project aims to provide support for students to overcome these deficiencies. For this purpose:

- a) A remedial program has been developed to compensate for the basic skill deficiencies of the students in these schools. The planned areas of emphasis in these remedial programs include Turkish, mathematics, and science literacy.
- b) In this context, necessary materials will be prepared and delivered to schools.
- c) In the scope of DYK courses, additional educational programs will be provided to the students in the selected schools.
- d) Science and Art Centers (BİLSEM), which are located in 81 provinces and provide educational support to gifted and talented students, will also support the schools in project planning and development in 2021.

PERSONAL DEVELOPMENT SUPPORTS: Multi-dimensional personal development supports will be provided to the students in the schools within the scope of the project. For this purpose:

- a) First aid training will be provided to all students.
- b) Psychosocial development support will be provided to all students.
- c) Swimming courses will be organized for the students who would like to participate.
- d) Life centers, which offer individual and group sports activities, will be established in all schools.
- e) Career days will be organized at least once a month in all schools to share the experiences of role models in fields such as science, culture, arts, sports, and industry.

f) All students will participate in cultural activities such as theater and cinema at least once during the project period.

g) Events will be organized against drug addiction in the schools.

h) VET schools involved in the project will be matched with Anatolian fine arts and sports high schools in their area. Within this collaboration, culture, arts, and sports events will be organized together to increase involvement with the community and sharing across different types of schools.

SUPPORT FOR PARENTS OF STUDENTS: Students’ parents will be supported academically and socially within the scope of lifelong learning. For this purpose:

a) Public education centers will organize trainings in fields requested by parents, and these parents will receive certifications after completing trainings.

b) It will be ensured that parents can continue their education and professional development through distance education programs.

c) Parents within the scope of the project will be given priority for the “Vocational High Schools Meet Families” project, which has been successfully implemented by VET high schools for years. In this context, VET students from neighborhood schools will help care for parents within the project by repairing old furniture and home goods and supporting them in other daily needs.

2 | DISCUSSION AND CONCLUSION

VET has contributed greatly to the economic development of Turkey by training the human resources demanded by the labor market for years. For this reason, particular attention has been paid to the development of VET since the first years of the Turkish Republic. Many policy documents, especially Development Plans, have attributed great importance to VET since then (Özer, 2020b). Another indicator of the importance attached to VET is the research conducted on vocational education by many institutions and stakeholders, especially non-governmental organizations. Therefore, both the public and private sector agree on the importance of VET for economic development.

However, most current problems faced by VET in Turkey are similar to those in other countries. In most countries, students tend to prefer pursuing an academic track instead of a vocational track, and consequently vocational training is mostly preferred by students from lower socioeconomic levels, and VET institutions suffer from higher absenteeism rates. Additionally, both the coefficient regulation, which restricted the access of VET graduates to higher education, and the TEOG, which placed all students in high schools based on their central test scores, intensified the magnitude of problems for VET in Turkey compared to other countries. For years, the MoNE has tried to eliminate the negative effects of these interventions through many countermeasures. These efforts have become more systematic after the announcement of the Education Vision 2023, and considerable progress has been made in a short time since then.

The most important characteristic of the period after the Education Vision 2023 has been the scale and scope of collaborations with various industry sectors. For the first time, sector representatives have been encouraged to apply their experience comprehensively to all components and processes of VET in Turkey. In this context, cooperation with the leading sector representatives in each vocational field has been successfully maintained since the 2023 vision was released, producing significant results in a relatively short time period. The performance of VET after this transformation, combined with VTAH and VTC’s critical industrial production during the COVID-19 pandemic, has positively shifted Turkish citizens’ and employers’ perception of VET. Consequently, the number of students who enrolling in VET high schools increased by 63% between 2018 and 2020. As a result, the average test scores of students

enrolling in VET high schools, as well as the number of high-achieving students enrolling in these schools, have increased. Therefore, VET high schools are now perceived as institutions worthy of enrollment for high-performing students. Additionally, while 2,5000 teachers were enrolled in on-the-job and professional development trainings in 2018, this number increased to 43,000 over two years with the support of industry sectors. Very important progress has been made with the backing of Turkish industries to increase the quality of teachers, which is the most important factor determining students' educational outcomes. Hence, many different indicators point to significant improvements in the Turkish VET system.

The MoNE also implemented two new and important projects to improve the quality of VET during the COVID-19 pandemic. First, research and development centers with strong infrastructure and human resources were established in 40 vocational and technical Anatolian high schools (VTAHs) to further increase the production capacity of VET, which already strengthened greatly during the COVID-19 pandemic. By structuring these centers to focus on intellectual property, they could now focus on registering patents, constructing utility models, and producing designs and brands. Second, although VET is the education type most negatively affected by the achievement gap, no specific project has focused on narrowing this gap in VET until now. A thousand schools were identified among the vocational and technical Anatolian high schools that had the largest problems in absenteeism, dropout rates, and academic achievement nationally. The "1,000 Schools in Vocational Education and Training" Project, which includes a comprehensive support package for these schools, has been started to improve the quality of VET across Turkey.

The "1,000 Schools in Vocational Education and Training" Project aims to increase the quality of VET on the one hand, and to close the achievement gap on the other hand. The project includes 1,000 VET high schools in 81 provinces, enrolling approximately 600,000 students. This is the largest scaled project designed by the MoNE to narrow the achievement gap. The project aims to compensate for the deficiencies in students' basic skills, increase their sociocultural capital, and support their holistic personal development. The educational environment of the schools will be improved and enriched through diverse resources within the scope of the project. In addition, remedial education and personal support in the fields of culture, arts, and sports will be provided for students in these schools.

The OECD (2012) has shown that the most effective interventions to support disadvantaged students involve eliminating schools' physical and administrative deficiencies, creating a supportive school atmosphere, increasing teacher qualifications, improving classroom teaching methods, and increasing interactions between the school and parents and non-governmental organizations. As mentioned by Carter (2018), because inequalities in education are related to multidimensional problems, the solutions to such inequalities must also be multidimensional. Associating the inequalities in education solely with academic achievement will not solve the problem, it will merely perpetuate the inequalities (Haas Institute for a Fair and Inclusive Society, 2017). For example, within the framework of the No Child Left Behind Law, which prioritized disadvantaged students in the USA, focusing intensely on test scores to decrease the achievement gap did not solve the problem, and instead led to test score inflation and unfair penalties for lower-achieving schools (CEP, 2007; Koretz, 2005). Therefore, policies for supporting disadvantaged students should consider the school climate, sociocultural context, and community factors as a whole.

In this context, one of the most important features of the "1,000 Schools in Vocational Education and Training" Project is that disadvantage is considered according to a multi-dimensional perspective, and the project plan is structured in coherence with this perspective. This project is also differentiated from similar interventions because does not just focus on students, but also administrators and teachers in schools, as well as families. A study by Cingöz and Gür (2020) suggests that policies investing in parents' education levels should be prioritized to alleviate the achievement gap in Turkey. Since parents' educational background is an important factor determining students' academic achievement, steps for increasing parents' education level are included in this project for improving VET across Turkey. Therefore, project

resources have been strategically allocated in coherence with the purpose of compensating for the disadvantages of both students and their families.

The progress and outputs of the project will be thoroughly monitored by the DNMA and shared with the public through published reports. When the project is successfully completed, the improvements in VET will expand to all VET schools to improve educational outcomes for all Turkish vocational and technical students. As a result, the achievement gap between VET and other high school types will decrease nationwide. Lastly, it is expected that the experiences from this project will lead to the improvement of the various planned interventions and supports, as well as the development of new initiatives that aim to narrow the achievement gap.

REFERENCES

- Acemoğlu, D., & Restrepo, P. (2018). *Artificial intelligence, automation and work*. NBER Working Paper 24196. National Bureau of Economic Research, Cambridge
- Allmendinger, J. (1998). Educational systems and labour market outcomes. *European Sociological Review*, 5(3), 231-250.
- Ander, R., Guryan, J., & Ludwig, J. (2016). *Improving academic outcomes for disadvantaged students: Scaling up individualized tutorials. Hamilton Project*. Retrieved from <https://www.brookings.edu/wp-content/uploads/2016/07/Full-Paper-1.pdf>
- Arslanargun, E., Bozkurt, S., & Sarioğlu, S. (2016). Sosyoekonomik değişkenlerin öğrencilerin akademik başarıları üzerine etkileri. [*The effects of socioeconomic variables on students' academic achievement*] *Uşak Üniversitesi Sosyal Bilimler Dergisi [Uşak University Journal of Social Sciences]*, 9(3), 214-234.
- Bol, T., Eller, C. C., Van de Werfhorst, H. G., & DiPrete, T. A. (2019). School-to-work linkages, educational mismatches, and labor market outcomes, *American Sociological Review*, 84(2), 275-307.
- Bozgeyikli, H. (2019). *Mesleki ve teknik eğitimin geleceği. İLKE Geleceğin Türkiye'si Analiz Raporu No.2. [The future of vocational and technical education. Future Turkey Analysis Report of İLKE, No.2]*
- Bölükbaşı, S., & Gür, B. S. (2020). Tracking and inequality: The results from Turkey. *International Journal of Educational Development*, 78, 102262.
- Breen, R. (2005). Explaining cross-national variation in youth unemployment: Market and institutional factors. *European Sociological Review*, 21(2), 125-134.
- Canbal, M. S., Kerkez, B., Suna, H. E., Numanoğlu, K. V., & Özer, M. (2020). Mesleki ve teknik ortaöğretimde paradigma değişimi için yeni bir adım: Eğitim programlarının güncellenmesi [A New Step for Paradigm Shift in the Vocational and Technical Secondary Education in Turkey: The Revision of Education Programs]. *Eğitim ve İnsan Bilimleri: Teori ve Uygulama*, 11(21), 1-25.
- Carter, P. L. (2018). The multidimensional problems of educational inequality require multidimensional solutions. *Educational Studies*, 54(1), 1-16.
- Center on Education Policy (CEP) (2007). *Answering the question that matters most: Has student achievement increased since no child left behind*. Washington, D.C: CEP.
- Cingöz, Z. K., & Gür, B. S. (2020). Ekonomik, sosyal ve kültürel statünün akademik başarıya etkisi: PISA 2015 ve TEOG 2017 sonuçlarının karşılaştırılması [The Effect of Economic, Social and Cultural Status on Academic Achievement A Comparison of PISA 2015 and TEOG 2017 Results]. *İnsan ve Toplum*, doi:10.12658/M0563

- Coenen, J., Heijke, H., & Meng, C. (2015). The labour market position of narrow versus broad vocational education programmes. *Empirical Research in Vocational Education and Training*, 7(9). doi:10.1186/s40461-015-0020-x
- Coşkun, M. K., & Ünal, B. (2006). Kültürel sermaye, eğitim ve eşitsizliğin yeniden üretimi. *Sosyoloji Araştırmalar Dergisi*, 9(1), 24-44.
- Deissinger, T. (2015). The German dual vocational education and training system as 'good practice'?. *Local Economy*, 30(5), 557-567.
- Dinçer, M. A., & Uysal-Kolaşın, G. (2009). *Türkiye'de öğrenci başarısında eşitsizliğin belirleyicileri: Türkiye'de eğitimde eşitliğin geliştirilebilmesi için veriye dayalı savunu projesi araştırma raporu*. [The determinants of disparities in student achievement in Turkey: defend the project research report based on data in order to improve equality in education in Turkey]. İstanbul: Sabancı Üniversitesi, Eğitim Reformu Girişimi.
- DiPrete, T. A., Eller, C. C., Bol, T., & Van de Werfhorst, H. G. (2017). School-to-work linkages in the United States, Germany, and France. *American Journal of Sociology*, 122(6), 1869-1938.
- Educational Research Centre (1998). *Early start preschool programme: Final evaluation report*. Retrieved from <http://www.erc.ie/documents/esfinal98.pdf>
- EQAVET (2015). *Actions to reduce early leaving in vocational education and training*. EQAVET Policy Brief. Retrieved from <https://www.eqavet.eu/Equavet2017/media/Documents/EQAVET-Policy-Brief-on-PLA-on-Actions-to-reduce-early-leaving-in-VET.pdf>
- Fuller, A (2015). *Vocational Education*. In James D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (2nd edition, pp.232-238). Oxford: Elsevier.
- Gençoğlu, C. (2019). Milli bir destekleme ve yetiştirme sistemi modeli: İlkokullarda Yetiştirme Programı (İYEP). [A national support and training system model: Primary School Education Program] *Milli Eğitim Dergisi [Journal of National Education]*, 48(1), 853-881.
- Güllüpinar, F., & İnce, C. (2014). Şanlıurfa'da eğitimsel eşitsizliklerin yeniden üretimi: Kültürel yapı, sosyal sermaye ve yapısal faktörlerin sosyolojik analizi. [Reproduction of educational inequalities in Şanlıurfa: Cultural structure, social capital and sociological analysis of structural factors] *Eğitim, Bilim ve Toplum Dergisi [Education, Science and Society Journal]*, 12(46), 84-121.
- Haas Institute for a Fair and Inclusive Society (2017). *Responding to educational inequality*. Berkeley, CA: University of California.
- Hanushek, E.A., Schwerdt, G., Woessman, L., & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the life-cycle. *The Journal of Human Resources*, 52(1), 48-87.
- Korber, M. (2019). Does vocational education give a labour market advantage over the whole career? A comparison of the United Kingdom and Switzerland. *Social Inclusion*, 7(3), 202-223.
- Koretz, D. (2005). *Alignment, high stakes, and the inflation of test scores*. Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing.
- Ministry of National Education-MoNE (2016). *PISA 2015 ulusal ön raporu*. Ankara: MEB
- Ministry of National Education-MoNE (2019a). *Türkçe-matematik-fen bilimleri öğrenci başarı izleme araştırması (TMF-ÖBA)-I: 2019. 4. sınıf seviyesi*. Eğitim Analiz ve Değerlendirme Raporları Serisi No:9. [Turkish-mathematics-science student achievement monitoring survey (TMF-ÖBA) -I: 2019. 4th grade level. Training Analysis and Evaluation Reports Series No: 9]. Ankara: MEB.

- Ministry of National Education-MoNE (2019b). *Dört beceride Türkçe dil sınavı: Pilot çalışma sonuçları. Eğitim Analiz ve Değerlendirme Raporları Serisi No: 11 [Turkish language test in four skills: Pilot study results. Training Analysis and Evaluation Reports Series No: 11]*. Ankara: MEB.
- Muja, A., Blommaert, L., Gesthuizen, M., & Wolbers, M. H. J. (2019a). The vocational impact of educational programs on youth labor market. *Research in Social Stratification and Mobility* 64, 100437.
- Muja, A., Blommaert, L., Gesthuizen, M., & Wolbers, M. H. J. (2019b). The role of different types of skills and signals in youth labor market integration. *Empirical Research in Vocational Education and Training*, 11, 6.
- Oakes, J. (1990). *Multiplying inequalities: The effects of race, socialclass, and tracking on oppurtunities to learn mathematics and science*. Santa Monica: The RAND Corporation.
- OECD (2012). *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*. OECD Publishing.
- OECD (2019). *Country note: Turkey*. Paris: OECD Publishing.
- Oral, I., & Mcgivney, E. J. (2014). *Türkiye’de eğitim sisteminde eşitlik ve akademik başarı: Araştırma raporu ve analiz. [Equality and academic achievement in the education system in Turkey: Research Report and analysis]*. İstanbul: ERG.
- Özer, M. (2018). The 2023 Education Vision and new goals in vocational and technical education. *Journal of Higher Education and Science*, 8(3), 425–435.
- Özer, M. (2019a). Reconsidering the fundamental problems of vocational education and training in Turkey and proposed solutions for restructuring. *İstanbul Üniversitesi Sosyoloji Dergisi [Istanbul University Journal of Sociology]*, 39(2), 1–19.
- Özer, M. (2019b). Background of problems in vocational education and training and its road map to solution in Turkey’s Education Vision 2023. *Journal of Higher Education and Science*, 9(1), 1–11.
- Özer, M., & Suna, H. E. (2019). Future of vocational and technical education in Turkey: Solid steps taken after Education Vision 2023. *Journal of Education and Humanities*, 10(20), 165–192.
- Özer, M., & Suna, H. E. (2020). The linkage between vocational education and labor market in Turkey: Employability and skill mismatch. *Kastamonu Education Journal*, 28(2), 558–569.
- Özer, M., & Perc, M. (2020). Dreams and realities of school tracking and vocational education. *Palgrave Communications*, 6, 34.
- Özer, M. (2020a). Mesleki eğitimde okuldan işe geçişi etkileyen yeni parametreler: Küresel dönüşümde yeni eğilimler. [New parameters affecting the transition from school to work in vocational education: New trends in global transformation]. *İnsan ve Toplum, [Human and Society]* 10(3), 1-27.
- Özer, M (2020b). *Mesleki eğitimde paradigma değişimi: Türkiye’nin mesleki eğitim ile imtihanı. [n vocational education paradigm shift: a test of Turkey's vocational training.]* İstanbul: Maltepe Üniversitesi Kitapları.
- Özer, M. (2020c). Türkiye’de mesleki eğitimde paradigma değişimi. [paradigm shifts in vocational education in Turkey] *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi [Gazi University Journal of Gazi Education Faculty]*, 40(2), 357-384.,
- Özer, M. (2020d). Vocational education and training as “a friend in need” during coronavirus pandemic in Turkey. *Bartın University Journal of Faculty of Education*, 9(2), 1-7.
- Özer, M. (2020e). Educational policy actions by the Ministry of National Education in the times of COVID-19 pandemic in Turkey. *Kastamonu Educational Journal*, 28(3), 1124-1129.

- Özer, M. (2020f). The contribution of strengthened capacity of vocational education and training systems in Turkey to the fight against Covid-19. *Journal of Higher Education*, 10(2), 134-140.
- Özer, M. (2020g). What PISA tells us about performance of education systems?. *Bartın University Journal of Faculty of Education*, 9(2), 217-228.
- Özer, M., & Suna, H. E. (2020). COVID-19 pandemic and education, In M. Şeker, A. Özer, C. Korkut (Eds.), *Reflections on the pandemic in the future of the world* (pp. 157-178). Ankara: TÜBA.
- Özkan, N. (2010). The role of families in the achievement of students at secondary education. *Trakya Üniversitesi Sosyal Bilimler Dergisi*, 12(2), 262-271.
- Perc, M., Özer, M., & Hojnik, J. (2019). Social and juristic challenges of artificial intelligence. *Palgrave Communication* 5, 61.
- Rözer, J., & Van de Werfhorst, H. (2020). Three worlds of vocational education: Specialized and general craftsmanship in France, Germany, and The Netherlands. *European Sociological Review*, 36(5), 780-797.
- Sahlberg, P. (2007). *Secondary education in OECD countries: Common challenges, differing solutions*. European Training Foundation.
- Shavit, Y., & Müller, W. (2000). Vocational secondary education: Where diversion and where safety net?. *European Societies*, 2(1), 29-50.
- Solga, H., Protsch, P., Ebner, C., & Brzinsky-Fay, C. (2014). *The German vocational education and training system: Its institutional configuration, strength, and challenges*. WZB Discussion Paper SP-I-2014-502.
- Suna, H. E., Tanberkan, H., & Özer, M. (2020). Changes in literacy students in Turkey by years and school types: Performance of students in PISA applications. *Journal of Measurement and Evaluation in Education and Psychology*, 11(1), 76-97.
- Suna, H. E., Tanberkan, H., Gur, B. S., Perc, M., & Özer, M. (2020a). Socioeconomic status and school type as predictors of academic achievement. *Journal of Economy Culture and Society*, 61(1), 41-64.
- Suna, H. E., Gür, B. S., Gelbal, S., & Özer, M. (2020b). Fen lisesi öğrencilerinin sosyoekonomik arkaplanı ve yükseköğretime geçişteki tercihleri. [The socio-economic background of science high school students and their preferences in transition to higher education]. *Yükseköğretim Dergisi*[*Journal of Higher Education*], doi:10.2399/yod.20.734921.
- UK Department of Education (2018). *Government pledge £28 million to support children and young people*. UK Press Release. Retrieved from <https://www.gov.uk/government/news/government-pledge-28-million-to-support-children-and-young-people>
- U.S. Department of Education (USDE) (2002). *No child left behind: A desktop reference*. Washington, D.C.: Office of Elementary and Secondary Education.