"More and more, we are witnessing the younger generation teaching the older generation."

Promethean Education Strategy Group
Teacher Effectiveness

Promethean

Case Study: Doğa School (Doğa Koleji), Turkey (Istanbul) | 20,000 students | K-12 | v1 |

Doğa School (Doğa Koleji)

"Lessons are far more enjoyable for students and teachers are more enthusiastic. There is much more dynamic content, colours, sounds, video, links, and so on. For example, if they are talking about history, they can see the castles, they can find more information, and there is greater opportunity to work with others to discover and construct knowledge.

The teachers are constantly improving and undertaking training so they can enhance their lessons and use digital materials effectively. Teachers are now sharing information and training and helping one another. Students say the lessons are far more exciting because they always see something new and different".
—Ugur Gazanker, General Manager

Background and Aims

Doğa School is a private academic institution formed in 2002. It now consists of numerous campuses, serving more than 20,000 students at kindergartens, primary and secondary schools in Turkey.

The School uses technology to enhance its pedagogical models for the 21st Century. A key challenge was to develop highly engaging learning and teaching activities to stimulate critical and higher-order thinking skills and to develop social and cultural awareness and understanding amongst students. This is central to the School's vision of developing well-rounded, highly educated and academically successful individuals with a sound understanding of the broader cultural, social and scientific world around them.

The School has invested significantly in new technologies, challenging teachers to produce dynamic, interactive and enjoyable lessons that foster learning through hands-on activities, experiments and projects.

The Structure

The School operates two unique educational models throughout its schools. The first is applied at kindergarten and primary levels, promoting personalised, active, hands-on learning around a 'nature-based learning concept.' It is designed to reflect students' experience of the world around them and encourages experimental outdoor learning. In addition to learning toward the national curriculum inside the classroom, students are encouraged to engage in a range of learning opportunities outside the classroom as well, including horse-back riding, looking after animals, growing vegetables and making cheeses, jams, pickles and bread.

This interaction promotes a greater awareness of and respect for the environment while, as teachers facilitate the process, the pedagogical approach promotes enquiry-based learning, knowledge construction, collaborative and social learning.

At the secondary level, Doğa School operates a different learning model called the 'Teenager MBA' (t-MBA), alongside the national curriculum. This model prepares students to be self-confident, entrepreneurial and tech-savvy social and business leaders, incorporating business and development lectures, conferences and summits, and materials from business administration master's degree programmes. It also includes a range of other educational methodologies and content, including seminars, workshops with business professionals, vocational observations, work experience days, internships, and involvement in entrepreneurship and enterprise projects. t-MBA students also help manage the school through Student Councils and their involvement in national- and international-based projects and events.

Business administration and entrepreneurial skills are valuable to all young people, regardless of their future work and life directions, and those youths' involvement in socially responsible projects continue to yield great benefits with more than 90 percent now involved in nongovernmental-related projects. The 'hands on' nature of pupil involvement was exemplified last year when the Student Council organised an International Youth Forum project in partnership with an international NGO. Students were involved in all aspects of devising, organising and delivering the project, hosting 325 students from 58 different countries.

Embedding Technology: Enhancing Educational Aims

Following a successful pilot for Promethean ActivBoards and accompanying ActivInspire software, the School decided to install the technology in all of its schools. Today, all classrooms have interactive whiteboards, computers and projection technology, and an accompanying interactive pedagogy supports classroom teaching and learning. There has been ongoing professional development for teachers, and the addition of other digital tools has enriched the educational experience of students and teachers alike. The school has since received a 'Centre of Excellence' award from Promethean and is also an 'Apple Distinguished School'. The Ataşehir Doğa Campus is now an authorised Apple Training Centre, providing a unique learning environment with several learning spaces, including a digital and space library, a planetarium and a simulation room. It provides a 'new generation' learning environment integrating iPads and ActivBoards which reflect the School's commitment to innovation in teaching and learning.

The interactive, multi-media and audio-visual content has provided a more stimulating experience with materials that target specific learning needs and styles. Simulations and dynamic representations help students better understand concepts and 'virtually' learn concepts that they might not so readily find in real life. Staff feel that technology has brought subjects to life, further stimulating the learning process. Student interaction with the boards, interactive materials and communication and collaboration tools enables students to analyze information and find their own solutions to the challenges before them. These observations are supported in a recent study published by the Ministry of National Education (Turkey) which showed that student engagement increased significantly when the Interactive Whiteboards (IWB) were used for instructional purposes. There was also general improvement in students' behaviour, translating to better student engagement. Results indicated that use of the IWB promoted student engagement in classroom lessons.

Teacher Effectiveness and Targeted Learning

Staff members feel the digital tools and materials have made them more effective. Creating, storing, enhancing and re-using digital materials frees them to focus on other areas of learning, ensuring timely input that focuses on learners' needs. They also feel more innovative and enthusiastic because they see the benefits and the links between their overarching educational aims and the role technology plays in helping them achieve them. As a result, teachers create more interesting, meaningful and enjoyable lessons. Staff members see how both teachers and students understand how technology increasingly promotes interaction with one another and with the lesson. Students can now maximize the technology to support their learning, while drawing on the knowledge and skills of others to support their learning activities and develop their understanding.

Staff feel that students benefit from accessing innovative educational resources, increasing their capacity for autonomous learning and developing digital competencies. They further believe that technology has enhanced students' 'learning to learn', their entrepreneurship, their critical thinking and creativity, and their social and communications skills. Creativity and entrepreneurial skills, in particular, have grown through collaboration among peers, teachers and others.

Technology is an integral part of the t-MBA programme, where tools such as ActivBoards, iPads, social media, communication technologies, video and podcasts are used regularly and effectively to develop students' knowledge and skills—which prepares them for tomorrow's innovative thinking and planning.

The schools have used technology to foster collaboration, communication and other social learning activities for students. This is not only viewed as a key element in supporting 21st Century learning, but it also helps alleviate parents' concerns that technology will hinder their children's social or human interaction. The effective use of technology to support social and collaborative learning has allayed such concerns. For instance, students have worked in teams of four to develop business-related projects, with each member taking responsibility for respective roles such as marketing, software development or public relations. They develop their own ideas for products, which they then create collaboratively. They utilise the technology to design, promote and gain support for the business idea, using social media such as Facebook to gather opinions and gain support. These projects are then presented to business professionals for evaluation.

Increasingly, students are taking more control over the direction and content of their learning. Teachers offer guidance and frameworks, but students develop the main content. Staff feel this has helped develop students' creativity and that the use of various digital tools has further enhanced this process. For example, teachers task students to design a product or to engage with a social issue, and then they challenge them to market or "sell" that product. Students then use technology to search for ideas and information, identifying 'competitors', finding gaps in the market, strategizing, and then marketing the idea or product. Students will then use a range of software and hardware to present their ideas to teachers, who provide feedback and support the next stages of development. In some cases, these products and business ideas have become reality and social media have been used to raise funds for charities.

The school also operates a 'Teen Mentor' programme, where students can attend lectures and receive training from top technology companies. The students then share their knowledge, giving lectures and training both teachers and their peers.

The Future

Despite the enormous steps already taken, the school aims to expand its brand of education by using technology in the most effective and innovative way. It feels technology can enhance its educational models and help learners become innovative, entrepreneurial and socially responsible citizens. It is exploring how technology can best support learners and improve teacher effectiveness. It also is conducting research with universities and businesses to explore what skills and abilities are required from high school students, so that they can develop new and appropriate learning experiences that increase students' lifelong learning potential and employability.

Whilst the School is already involved in numerous national and international partnerships, it hopes to extend this to a number of countries in the near future. It intends to continue working with the biggest and most innovative education and technology companies in order to push boundaries and develop a distinctive, dynamic, creative, meaningful and innovative approach to learning and teaching.