

## Western and Northern Europe

### Case Study 9: The New School in Holon by the spirit of High Tech High San Diego (HTH), Holon, near Tel Aviv, Israel

#### Success factors

- Based on a proven success model
- Strong digital and personal connections between student and teacher and between teachers
- Project based learning
- 1-2 and 1-1 policy
- Good connectivity and wireless access
- Technology underpins the way the school operates
- All teachers are competent and confident with technology and believe in the benefits of technology enhanced learning
- Students can improve their assignments through dialogue with the teacher through Google Classroom and by consulting other students so becoming active learners

#### About the school

The school takes students in the middle and high school range (12-18). It opened six years ago with an ethos of equity and a project based learning approach. It is based on the model employed by High Tech High in San Diego in the U.S. but it does not have any direct support from the High Tech High Group. The initial intake of students had a range of educational challenges as the concept was new and parents were hesitant about sending their children to a new school with a less traditional approach to learning. It now has 300 students from across the region applying for 120 places each year and with its open policy, a lottery determines who will be accepted. Students therefore have a range of abilities. In practice most of the students are from Holon with a handful of others from rural areas around the city. It is a public school so is controlled by the Ministry of Education but has some freedom given its experimental nature. For this reason, class sizes are currently 25 instead of the Israeli norm of 36-41 - although that dispensation is in danger of being removed.

The school firmly believes that every student should have same opportunities and develop at their own rate so specialising in subject areas does not take place until year 10. Students are taught in thematic areas in middle school and in subject groups at the high school age.

#### School achievement

The school has yet to have the first of the year groups sit the national SATs which will happen this year. As the first four grades comprise of students with challenging behaviours and abilities it was anticipated that might not pass but now, after nearly six years at the school, internal assessments suggest that these students now have the potential to achieve reasonable grades. The City of Holon have employed three researchers to examine school experiences in the city and the results are revealing that HTH is achieving more than the other schools. Students at HTH enjoy studying; they have considerable motivation; and they are more curious than students at other schools. Unlike

most schools, at the end of the school day students do not rush home and many are found still studying at the school at 8pm when the school closes either with a teacher or on their own.

#### Use of digital technologies

The school was designed as a technology rich school so it underpins the way the school operates. It operates Google Classroom for document sharing and uses Office 365 tools. In Israel all textbooks must be digital except for mathematics and English. Social learning tools are rarely used although Facebook is used occasionally for a specific project. Robotics are used in the middle school. Students have access to digital cameras and scanners.

#### Technology infrastructure and devices

The school has a 1-2 student-computer ratio in the middle school and in the high school the ratio is 1-1 with students bringing their own devices to school. Laptops were selected over tablets as the school found them more versatile and students preferred them. Those who do not have a device are loaned one in school which cannot go home with them, but most students do have access to a computer at home although not all will have internet connectivity at home as the State of Israel has a “computer for every child” policy. Every classroom has a desktop computer and projection facilities. Students can use smartphones in class if the teacher deems it to be of value. The school has excellent bandwidth and wireless access points all provided by the Ministry of Education. There is one full time technical support but all the teachers are all confident and competent with technology.

An innovation centre supporting the city has recently been located within the school. The centre has maker instruments, a 3D printer and a digital editing studio. The school is currently negotiating use of the facilities.

#### Digital pedagogy

All teachers firmly believe in technology enhanced learning while a few are particularly gifted in digital pedagogy. Lessons are at least 90 minutes long – some are longer. Project based learning is carried out much of the time, particularly in the middle school with most subjects being taught this way. Teachers use the technology to assign students projects and activities. Students are sent their assignments via Google Classroom and students send their work back this way. It is marked electronically and returned to students who can take the teachers comments and improve their work sending it back and forth until the students are satisfied. This is the reason students are so motivated.

The school was given special dispensation by the Ministry of Education to set final examinations internally in some subjects. Consequently, they are assessing final year students through a cross curricula methodology. Computer science is an elective option in the high school.

#### Teacher professional development

Teachers are all competent users of technology; they support each other and learn together They are constantly changing and trying new ideas and all teachers are reflective practitioners. There are regular teacher conferences and students are consulted about their learning experiences and asked how they can be improved.