# Deutsche Botschaftsschule Teheran
# ICT Concept

## Vision

ICT should be easily accessible to all members of the learning community.
ICT should be used as a learning, communication, presentation, collaboration and documentation tool integrated into all grades.

## **Equipment** (DA/IS)

**Kindergarden** - 6 x Cubettos (programming robot)
**Elementary School** - 90x iPads
**Secondary** - 82 laptops distributed to the classrooms and stored at central offices and the library.
**General** - Network printers, WiFi throughout the campus, headphones, networked servers, PC and iBoard in every classroom.

## ICT Structure

The **management**, in cooperation with the **heads of digital learning** and the **non-pedagicical IT staff**, is responsible for ensuring that sufficient resources are available, maintained and ready for a meaningful ICT deployment.

The **heads of digital learning** are responsible for providing their colleagues with ICT training and advancing digital learning at the school. They propose new purchases of hardware and software as well as subscriptions to various online platforms

The **administration** takes care of the payment of the accounts for online portals and learning platforms.

The **non-pedagogical IT staff** is responsible for providing technical support for all hardware and the school network, for installing software and managing the necessary accounts.

All **teachers** are responsible to ensure that ICT competences are developing in all classes and that ICT is used as a learning tool.

All **students** use the provided equipment and network responsibly and with care.

## Learning and ICT in the German Section

Digital solutions should provide teachers and students with extended opportunities to work in a contemporary way and to contribute their personal media experiences in order to practice a creative, networked and stimulating approach to learning content.

## Kindergarden

The rooms of the kindergartens are equipped with PC, iBoard and a printer to enable the use of digital educational games and as a medium for the presentation of digital content (image, sound, video, ...) In the kindergarten, the children are introduced in a playful way to the basic idea of programming through the use of Cubettos.

## Elementary School

In elementary school, children use iPads to learn, practice and participate in diagnostic tests in the classroom on online platforms such as Antolin (mandatory for all), Sofatutor and Grundschuldiagnose.de. Since the school year 2017/18 the Klassen 3 and 4 are working with the platform Grundschuldiagnose.de, from the school year 2018/19 Klasse 2 will join in. From SJ 2018/19 there will be class accounts at Sofatutor in a third and a fourth class, so that the students can also work on individual devices in the classroom or at home. The method Flipped Classroom will be used in phases using Sofatutor. The iPads are used for research purposes and as a writing and presentation tool. Students can use the iPads to record, edit and play videos. An app with exercises for German and math class 1-4 gives students the opportunity to practice independently, with immediate feedback on their results. We aim for coding lessons through code.org throughout all primary and some secondary classes in the school year 2018/19. On the school's laptops, students can practice using Office applications and use these programs for presentation or documentation. Elementary school students learn

the safe use of social networks, the latest in the fourth grade. As a platform for a digital portfolio, the Seesaw app will be available to teachers and students starting in the 2018/19 school year. In some areas, teachers and students can use DBST's Moodle e-learning platform on e-dbst.de. The iBoards in the classrooms are mainly used as a presentation medium. Working with learning applications can complement instruction in short frontal phases. For intensive interactive use, the devices offer only limited possibilities.

After Klasse 2 children can operate iPads and Windows laptops. They can find information on the Internet and differentiate between advertising and information. They can deal with online platforms and operate learning applications.

After Klasse 4 children can operate iPads and Windows laptops.They can find information on the Internet, rate their source, distinguish between advertising and information, create and design digital content (text, image, video). The students know the basic functions of the Word and PowerPoint Office applications and can apply them. You can deal with online platforms and operate learning applications.

## Secondary

Students use laptops as work tools for word processing, for math applications (such as GeoGebra) to create presentations, to use prepared learning materials from the Moodle E-Learning Platform (e-dbst.de) and to communicate and collaborate online (Mail, Cloud, Google Docs).
Online research can be done on the laptops, on student’s private devices (smartphones) and on the iPads of the library.
The iPads can be used to easily create and edit videos.
The iBoards in the classrooms are mainly used as a presentation medium. Working with learning applications can complement instruction in short frontal phases. For intensive interactive use, the devices offer only limited possibilities.

In History classes, from the school year 2018/19 onwards, through the series of teaching aids "Zeitreise" in grades 6 - 10 and with the help of the digital teaching assistant, differentiated work becomes possible. Listening examples of this series, which are available online, can be accessed in class or at home. From grade 5 to 9, a digital teaching assistant will also be used in German as from the 2018/19 school year (German Kombi Plus).

## Learning and ICT in the International Section

**Vision:**
In the International section of DBST, ICT is viewed as an integral part of the curriculum and is implemented in daily teaching and learning. In PYP classes It is embedded in an authentic and relevant way in the units of inquiry and other areas of the curriculum to support inquiry and help students realise their potential as lifelong learners in a digital age. In secondary classes,
the students explore the application and impact ICT in more depth to be able to meet the challenges of this new and growing field in tertiary education and workplace.

ICT encompasses the use of a wide range of digital tools, media and learning environments for teaching, learning and assessing. It provides opportunities for the transformation of teaching and learning and enables students to investigate, create, communicate, collaborate, organize and be responsible for their own learning and actions. Teaching of ICT is thus more than just enabling learners to use hardware and software; The children should be able to develop and use transferable skills in a digitally connected world. As such every teacher- homeroom, specialist and teacher-librarian- is responsible for creating opportunities for children to learn and use IT skills.

ICT is also used by teachers in collaborative planning meetings, developing and mapping of school's Programme of inquiry and curriculum, and recording and assessing and reflecting on learning.

**Aim:**
**The students will be able to:**

- To develop ICT capability in investigating, selecting and using information;
- To use ICT as an effective and appropriate means of communication and collaboration;
- To apply hardware and software knowledge to create, organise and present information;

- To apply ICT skills and knowledge to their learning in other areas, and ultimately to use it to self-assess, monitor and plan their own learning;
- To use their ICT skills to develop their language and communication skills;
- To develop and foster technology literacy throughout PYP years and beyond
- And to become informed and responsible digital citizens.

In the international Section of DBST, ICT learning objectives for each year group is based on relevant IB documents in PYP classes and international standards in classes in the Secondary. An IT scope and sequence document will be ready along with other scope and sequence documents for the verification visit.

**ICT resources in the International Section**

***We strive to provide all the children and teachers with equitable access to all IT resources available to us.***

From KG3 to class 5, all classes are equipped with a class set of shared iPads, based on the number of students in each class. A number of core apps is installed on all the iPads and are regularly used in classes.

In upper primary and secondary, each class has a number of shared laptops which are used to develop a different set of skills appropriate for their age group.

All teachers have access to Virtual Staffroom, a password-protected website, in order to have immediate access to International Section and PYP documents, planners, minutes of the meetings to edit and upload documents.

By the academic year 2020-21 all PYP teachers will be trained to use Rubicon Atlas platform to upload planners and map and align curriculum objectives in the school's programme of inquiry.

Every class, from kG1 to class 8, has their own page on Edmodo website, created by homeroom teachers in the PYP years and all the teachers in Secondary. Children and parents are given the class code to access the

website where children's learning in class is shared with their families in a protected environment. We aim to use Edmodo as a tool for flipping classrooms by the academic year 2019-20

Seesaw is used in KG3 to class 5 as a digital portfolio tool as required by the PYP.

All children and teachers are provided with usernames and passwords to a number of digital learning environments to support different areas of the curriculum. Depending on the learning needs and the budget available to us, we will modify these resources in the future.

A number of DVD's and software is kept centrally and is available to primary and secondary teachers for class use upon request.

Last year all the children in the international section were given individual accounts on myOn, an online literacy programme based on Lexile system, to have access to a very rich online library. Teachers would also use this platform to assign projects and homework and to monitor children's progress in reading and comprehension. Unfortunately, since to to political sanctions we could not continue our subscription to myOn, we will have to replace it with another reading programme of the same caliber.

*Next academic year*, myOn will be replaced with Scholastic Reading Programme which boasts similar features. We are also planning to get subscription to other educational websites for secondary to support teaching and learning in maths.

**Training and support**

In-house training sessions for teachers are organised and led by the Digital Learning Leader on using smartboards, implementing Seesaw in class, using some of the core apps installed on the iPads and any other relevant topic.

*Next academic year*, we will continue to have regular and timetabled IT training sessions open to all interested teachers from both German and International sections.

We are trying to go paper-less in Professional Development sessions and collaborative planning meetings. Most of the PYP PD sessions are carried

out digitally as all teachers are now enabled to use google docs and google forms.

All communication regarding IT issues is done *only* through DBST email, addressed to digital Learning Leader and non-pedagogical IT team members.