Information and Communication Technology

Beginning Coding (Grade 6-8)

Berkeley International School
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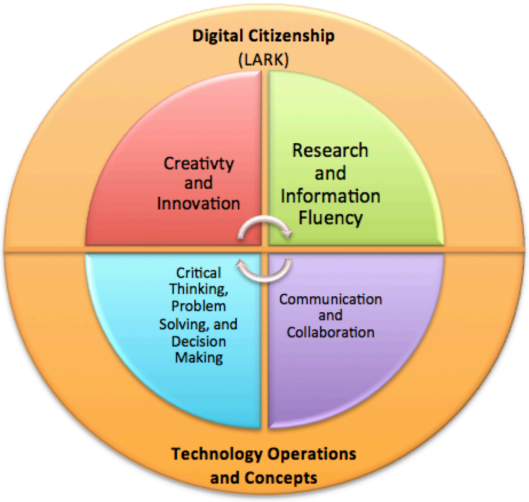
The Information and Communication Technology (ICT) program provides opportunities for students to further develop digital literacy skills through the sue of technology. ICT plays an important role for every 21st century learner, encouraging students to develop the technology and innovation skills to prepare them for today's media-driven world.

Beginning Coding Course:
Throughout this course students will be introduced to basic computer languages including HTML, CSS, and the beginning of Java. Based on their previous knowledge and dedication to the class, students will have the opportunity to move through the lessons to learn these languages, and more at their own pace. By the end of the course students will be able to create their own webpage to be published online written in the coding languages they learn while in class.

The Curriculum:
The standards used at Berkeley are closely based on the ISTE NETS for students and the Common Core State Standards. These standards are designed to promote transformative learning and ensure that learners are presented with opportunities to make the best of the ICT recourses that are available to them. In this class we will be using Code Academy as well as other open source software for publishing websites. Although students in Beginning Coding will be focusing on learning basic computer language skills, they will still follow and meet the ICT standards laid out below.

The following diagram summarizes the ICT Curriculum.

Promoting responsible digital citizens is recognized as having an "umbrella" role in the use of technology, and is consistently integrated within all lessons. Digital citizenship can be defined through the Legal, Appropriate, Responsible, and Kind (LARK) policy. Technology instruction and integration is underpinned by Technology Operations and Concepts. Students continuously learn and increase their knowledge of various software and tools as they work with technology. For this course



Areas of Monitored Progress

Students will demonstrate progress towards the Technology Standards in the following areas (which s reflected on the Standards Based Report Cards):

1. **Creativity and Innovation:** Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. **Communication and Collaboration:** Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and continue the learning of others.
3. **Research and Information Fluency:** Apply digital tools to gather, evaluate, and use information.
4. **Critical Thinking, Problem Solving and Decision Making:** Use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
5. **Digital Citizenship:** Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
6. **Technology Operations and Concepts:** Demonstrate a sound understanding of technology concepts, systems and operations.

Berkeley School-Wide ESLRs (Expected School-Wide Learning Results):

7. **Effective Communication:** Effectively communicate ideas, thoughts, and opinions with the aid of technology in a concise and organized manner in personal, public and global spheres.
8. **Responsible Global Citizenship:** Uses technology as a means to understand the world around them.
9. **Independent Learner:** Motivated and take an active role in the learning process through engaging in all class activities, and troubleshooting problems independently.

General Information

Students will have class every other day, this means that some days we will be meeting twice, and other days three times. During this time students will work to enhance their technology skills while working bot independently and collaboratively with peers within the classroom. Students will be using Code Academy, which is a web 2.0 tool, and can be accessed at home. As mentioned previously, there will be a minimum expectation for a pace for students to work through the lessons, however, due to the nature of the program students are allowed to work ahead of the normal pace, and continue their coding practice from home on nights and weekends if they wish. Students will be responsible for working in class to finish assigned tasks. If students do not finish the task in class, they may be asked to continue outside of the classroom. Minimal homework will be assigned, but all students are encouraged to practice at home.

Rules and Expectations of Technology Use

A complete list of rules and expectations can be found din Berkeley's Responsible Use policy, as well as the 1:1 Laptop Expectations. Students may choose to bring their own device to work on in the lab, or may use the IT Lab computers.

Students should keep in mind the following class rules:

1. Come to class with a positive attitude towards learning.
2. Always try your best!
3. Respect others and the learning environment.
4. Keep the LARK policy in mind when use technology (Legal, Appropriate, Responsible, and Kind)

Technology Skills (to be learned but not limited to)

- Basic HTML Language
- CSS language
- JavaScrip Language
- JQuery (for intermediate learners)
- PHP (for advanced learners)
- Python (for advanced learners)
- Ruby (for advanced learners)
- Making a static webpage
- Making an interactive webpage

Technology Tools (to be used but not limited to)

Codecademy

KHAN ACADEMY