Lesson Title: Data types (Computer science)

Lesson Duration: 30 Minutes

Level: 9

Student Age Range: 14-15

Learning Style(s) of Students:

Additional Student Information: Optional Lesson (Students choose this lesson)

Digital Technology Hardware Required: Touchscreen and interactive board, Smart Phones or PCs, Internet connection

Digital Technology Software Required: Online programming editor (e.g. replit.com, onlinegdb.com), any program to create Scorm Packeges (e.g. Lumi(h5p), Ispring suit, learningapps.com(web2.0 tool)

Other Equipment Required: Turkish National Education information and communication network

Lesson Plan:

Learning – Teaching Activities	
Engage	"What is data?"
Explore	Examples for data (Tshort colour, The weather condition, How many students, Date….) Programming Data types
Expression	Integer: Any number is a numeric value. For example, in mathematics, the number 4 is expressed as an integer. Integers can take a positive, negative, or zero value. Does not include fractional values. For example, 99, 105, 0, -56, and 7896 are integers. As we mentioned before, the data type of integers is int (integer) Strings: Textual data on which mathematical operations cannot be performed and which we enclose in single or double quotes are also called character strings. Remember that we call the data type of these as str (string). Float: Many computational operations use numbers that are fractions. For example, to calculate the circumference or area of a circle, we need the value of π, which is expressed as approximately 3.14159. This is how Python handles numbers with dots, and these numbers are called real numbers. As you may remember earlier, the data type of such numbers was called float. In some cases, we may need to convert our float type data to integer. In this case, we can use 2 functions.

	The first of these, the int(x) function, always rounds to a sub-sample, while round(x) rounds to the nearest integer. You can specify the rounding precision with the 2nd parameter of the round() function.
	Boolean
	Boolean type is one of Python's built-in data types. It's used to represent the truth value of an expression. For example, the expression $1 <= 2$ is True, while the expression $0 == 1$ is False.
Elaborate	Data types are displayed with the "type" function using an online editor or IDLE
Evaluate	4 type of data(integer, float, string, boolean) Drag and Drop question (Learningapps.com) Create scorm package Upload package to Turkish National Education information and communication network Evaluation is going to be individually over EBA(Turkish National Education information and communication network)