



## **A Survey of Learning Programing in Turkish**

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Choosing the first programming language to be taught in high school and university curriculum is an important task as it directly affects the efficiency and success of a programmer's education and training. Considering the fact that the grammar and the keywords of commonly used languages invariably reflect those of English, it is natural to assume that teaching the key programming concepts in the students' native language can be useful for easing the learning process. This survey is carried out as a part of the requirement analysis work for a project that involves designing and developing a new programming language with a suitable Turkish-based syntax for teaching programming concepts to beginners.

In this work several Turkish-based programming environments and languages are studied in terms of aims, features, syntax, keywords, constructs, data types, built-in functions and supported paradigms. Similarities and differences of the languages are compared in terms of learnability.

Results of this study indicate that there are various environments and languages aimed at divergent target audiences. Examples span a large area including pseudocode, general purpose languages, and those for developing visual forms, game based programming and visual programming using blocks. This study is expected to help understanding the deficiencies in current offerings and improving upon them or developing new solutions to ease the teaching of programming.

**Keywords:** programming languages, Turkish, first language, native language.

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