Both visual and text-based programming have their pros and cons when it comes to teaching children code. Some would argue that visual-based coding, such as that used by Scratch, is easier for younger children to get to grips with - it's more fun, looks prettier and more appealing, and has easy-to-use features such as drag and drop, and drop-down menus which younger kids can handle. Text-based programming is sometimes thought of as the next step on from learning visual-based programming. It's considered by many to be more appropriate for older children who have a foundation in visual-based coding already, are comfortable using a keyboard, and have some grounding in logical thinking and basic arithmetic.

Ofsteds subject review of the computing curriculum concluded that schools have some way to go to ensure children leave formal education with the skills they need to thrive in a digital world. Firstly, it concluded that a low number of specialist teachers and a lack of teaching time allocated to computing "will have significant consequences for the quality of education that pupils receive in computing if nothing is done to remedy the situation".

The presentation of documents and the search for information in the array will be divided into two models. Following this logic, we will call the information array description model a vector one, and a model of information search in an array, a linear one.

This separation is due to the fact that documents are written as binary vectors, while search queries are linear transformations over these vectors.

In the vector model of the information flow, several basic concepts can be distinguished: a dictionary, a document, a flow, and search and correction procedures. Requests. A dictionary is an ordered set of terms, the cardinality of which is denoted as D.

The document is a binary vector of dimension D. If the term is included in the document, then 1 is put in the corresponding bit of this binary vector, otherwise. Usually, all operations in the linear indexing model and document searches are performed on search images of documents, but they are usually referred to simply as documents programming.