

## A study on place distribution of elementary schools in Shirvan city using GIS

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**ABSTRACT:**

A quantitative approach to the establishment of schools and lack of attention to the relationship between educational use and other uses in the past led not only to reduced education efficiency but also to the prevalence of various mental and physical illnesses, waste of time and money for students. In this study, after explicating the subject, the effective criteria and regulations on locating schools were identified. Then, the criteria influencing school site selection were weighted according to their importance using Analytic Hierarchy Process (AHP) and considering the weight obtained, information layers were converted to the appropriate format. Then, the layers prepared in this study were combined by weighted overlay method. The results showed that the majority of primary schools in Shirvan, largely satisfy the site selection criteria. However, spatial distribution of schools in Shirvan is not consistent at the local level and in relation to the population; some neighborhoods suffered from the lack of primary schools. On the other hand, several neighborhood schools were located very close to each other indicating misallocation of schools at the local scale.

**Keywords:**

Site selection, AHP, Spatial distribution, Primary schools