



**Data Mining within Students Results Of
The ministry of Education in the Republic of
Iraq: Current situation and improvement
opportunities**

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Abstract

The study aimed to explore the improvement opportunities for data mining within student's results, and extend an overview of the data mining methods that have been applied to predict the student's performance. In addition, this study shed light on how the prediction algorithm can be applied to distinguish the most substantial attributes in a student's data.

This study was used several techniques such as the data mining, data processing, and education rolls to build a special model for the Iraqi Ministry of Education for the purpose of detecting a problem or developing a particular method, in terms of teaching methods, educational curricula and developing the abilities of students or teachers alike.

The result of the study showed that student mark for the preparatory stage on the Arabic language is stable. so the relationship that the usual Arabic and Islamic language of course that are of nature easier than Scientific subjects such as mathematics, physics, and English. Therefore, the researcher proposes to the Iraqi Ministry of Education to take into consideration the many delays or deliberate failure in these articles and the abolition of the penalty of non-repetition, which states that the student should not give two and a half marks on the overall rate in case of failure, this leads to low overall success rates.

Furthermore, the result showed that the success rates in Karkh first is much larger than the rest of the general directorates of education. Thus, related to the nature of the region

and the difference in the population and the awareness of parents in this region as the majority of this area of a scientific and commercial nature at the same time between doctors, engineers, teachers and university professors to this individual differences between this region and other regions.

The result presented that the difference in the success rates of conservation materials such as the Arabic and Islamic language of the literary specialty higher compared to scientific competence. In addition, the result presented that the success rates of mathematics for scientific specialization is much higher than the success rates of literary competence.

Additionally, the result showed that there is an impact on the level of success rates for students in the three stages of the ministerial, which was related to the nature of the work of the father or mother. Moreover, the success rates are in the classification A of the student whose nature is the work of their parents between a doctor or an engineer or a university professor.

Moreover, the result showed that there are low success rates for students whose mothers have work even if the nature of the work of the mother doctor or professor.

The result showed that the student whose parents are alive has a high success rate similar to that of one who lost one or both parents because of his lack of daily follow-up to the student. As well as the psychological state in which the student is and the deprivation that the student lives from losing the tenderness of the mother or father or both. Psychological introversion and isolation of society.

Based on the results this study recommended that the attention of decision-makers at the Ministry of Education in Iraq should be drawn the necessity to improve educational competencies, containing realization of the adopting of effective tools in data mining.

Key words: Big Data, Data Mining, Binominal Data, Frequent Pattern, Association Rules, Support, Confidence, Applied Rules, Discretization, Performance Prediction