

# Data mining to reduce Drop Out rate of student: Use of Classification and Prediction method

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**Abstract:** Dropout rate of student is a big risk for both the educational institution as well as for the upcoming career of student. It is the need of today's era to find out reason behind increasing drop out rate of students from the courses. This paper tries to identify the reasons behind increasing dropout rate of student. Taking into consideration the three reasons viz. average learners, family background and interest in subject, the dropout rate of student can be predicted and analyzed to retain students in the institution. Classification and prediction method of data mining is used to find the exact reason. Through mining available data of student, the factors that influence the academic development of student can be recognized.

**Keywords:** dropout, classification, prediction, influence, student.

## 1. Introduction:

Data mining (sometimes called data or knowledge discovery) has become the area of growing significance because it helps in analyzing data from different perspectives and summarizing it into useful information [1]. Education is an essential element for the betterment and progress of a country. It enables the people of a country civilized and well-mannered [2]. There are various reasons why student want to abandon the course in between, due to which not only the career and future of student affect as well as it affect the development of Nation. More the educated people more is the nation developed. The following three reasons are equally responsible for the dropout of students from the course:

- Average learners

- Family background
- Interest in subject\*

Educational data or data available with the institution can discover the unidentified and unpredicted fact why the student dropout rate has increased. Advance study says that it is desirable to identify the students who tend to dropout if the performance of student degrades. It has become necessary to analyze the results and performance of each and every student and prevent them from abandoning education. Mining educational data available with the institution can trace out the student who can leave the institution by any of the above three reasons. Fig 1.1 shows Requirement and Result that gives reasons behind students drop out.

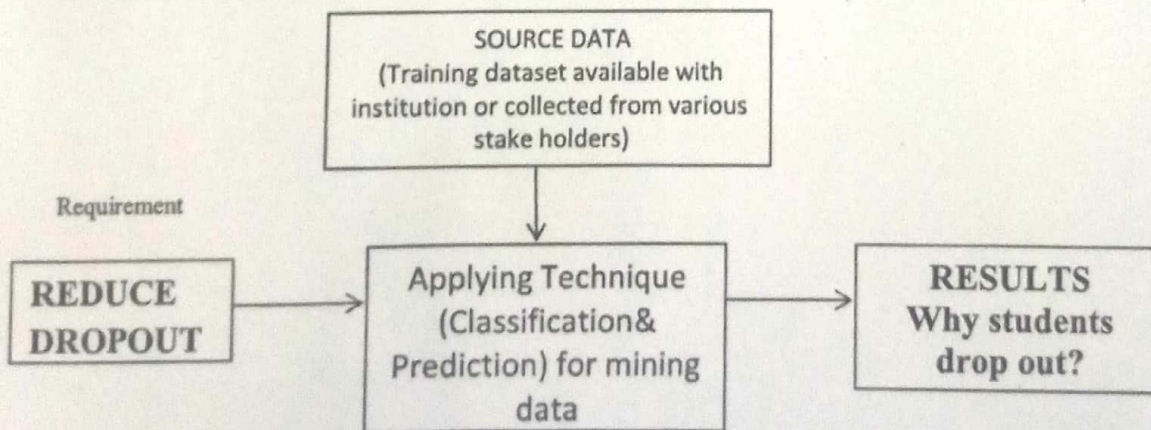


Fig. 1.1 Requirement and Result Model

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