PREDICTIVE EDUCATIONAL DATA MINING ON LEARNER INFORMATION SYSTEM

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The Department of Education (DepEd) has different information system used in providing quality education for the learners in kindergarten, elementary and secondary schools. It used the Enhanced Basic Education Information System (EBEIS) which is responsible for the inventory of building or classroom and other facilities in the schools, Electronic Human Resource Information System (EHRIS) handle the data responsible for the profiling of the workforce of the teaching and non-teaching personnel, Learning Resource Management and Development System (LRMDS) was developed to attend the needs of the learning materials such as books, self-learning kits, module and other resource that may use in delivery of learning, and the Learners Information System (LIS) holds the learner’s information during the time they cater by the Department of Education. Among these systems the most essential system in the Department of Education is the Learner Information System because it holds all of the main data needed by the Department such as the numbers of Enrollees, number of Drop outs, and other data related to the learners which is primarily needed on the operation and for the major data-driven decisions that improved education services.

Once the Learner Information System combined with Predictive Educational Data Mining it can be an advantage in educational institutions. Learner Information System with Predictive Data Mining will be one of the most important tools to solve the problems encountered in the schools such as increasing drop out, lack of facilities issues, lack of learning resources issues and other related issues may possibly resolved using this tool. Data mining techniques will improve the efficiency of academic performance in different
educational institutions especially once the problems are forecasted before it was encounter. Learners Information System with Predictive Educational Data Mining can forecast appropriate field or strand of study for senior high school graduates as well as incoming grade 11 students or even identify students who are on high risk of possible drop out and can even use on forecasting the population of incoming students. Using predictive analytics or forecasting models in this kind of environment will enables institution to come up on making right decisions that may impact students over-all performance this will help School Administration to decide if there’s a need for additional teachers or manpower pooling, additional classroom, chairs, books, division of loading or proper scheduling of subjects and teachers for the better academic performance of learners.

Predictive analytics improve the quality of education by providing right information for decision makers to take better decisions. To predict the academic and behavioral performance of the learners the records from the previous grade level of the students should be encoded on the Learners Information System, once it was encoded on the system it will automatically give knowledge about the forecasted performance of the students and once the students it at risk the system will give this information to the registrar which will be subject or undergone through guidance counseling procedure which may help the students.

References:

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