Chapter 1

Learning Analytics: Potential, Protection, and Privacy in the Educational System

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ABSTRACT

Learning analytics offers many exceptional opportunities, but how can a programme or institution use it successfully? It provides better insight into the teaching process and the feedback from college students ultimately improves schooling: this is the concept behind learning analytics. The use of learning analysis to guide the design and deployment of learning is becoming more popular. Educational institutions at all levels are realising that with the help of technology they are better able to gather data that would be very valuable when analysed. The aim of learning analytics is to apply facts from extraordinary structures and databases that help students to learn and teachers to improve their teaching strategies. To ensure that educational institutions obtain their greatest desires, as done through the usage of learning analytics, there is a vital need to increase the viable requirements analysis method. This is in addition to carrying out the performance evaluation consistent with it. This chapter discusses learning analytics and gives a critical analysis of the potential, protection, and privacy that learning analytics has in educational institutions.

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INTRODUCTION

Learning analytics has been described as ‘the measurement, collection, evaluation and reporting of statistics approximately learners and their contexts, for functions of understanding and optimising learning and the environments in which it takes place’ (Society for Learning Analytics Research, 2012). Fundamentally, learning analytics is involved with combining special types of information regarding student engagement and learning (e.g. statistics generated by mastering control systems, pupil systems, library structures and different assets associated with learning and coaching) that allows you to higher recognize, and enhance, the getting to know stories of our college students. Learning analytics can be specifically valuable when teaching at scale, or on-line, makes it extra hard for body of workers to know how their students are learning (Brown et al. 2011).

Learning Analytics can offer the strategies and tools to gather scholar records throughout the transport of a lesson so one can replace person scholar profiles. The forms of students facts generally used belong to the ‘lively pupil records’ class and can consist of engagement in mastering sports, overall performance in assessment sports, interaction with digital educational resources and gear and/or behavioral records. Analyze and record on student statistics to facilitate the teacher comes to a decision on personalized interventions (Arnold et al. 2012). To do that, Learning Analytics utilize both ‘Active learner information’ as well as ‘Stagnant Learner information’.

Learning Analytics may be categorized in three essential strands, which make the most the same student facts types, however purpose to obtain extraordinary effects:

DESCRIPTIVE ANALYTICS

It usually ambitions to analyze scholar facts and create dashboards that depict significant patterns or insights emerging from those analyses. In this experience it affords “What has already occurred” and it’s far related to the “Discover Patterns inside scholar statistics” final results mentioned formerly (Blikstein et al. 2011). Examples of Descriptive Learning Analytics tools encompass SmartKlass and the Learning Analytics Enhanced Rubric, which are plug-in for the Moodle Learning Management System.
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