

## Learning Analytics: A Performance Measurement Model

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### ABSTRACT

*The world is changing every day from time to time, so it is necessary for an individual to know or to be aware of the changes happening in the world. Technology has an important impact in all aspects of higher education worldwide. Education is considered as the bridge for filling the gap between the technology and the changing world. It brings new opportunities and means for improving access and the quality of higher education. Yet, for various reasons the inclusion of how to use technology to improve higher education is uneven from region to region, country within a region, and institutions within a country. This paper is a discussion on various dimensions of Learning Analytics as a model for analysing the teaching and learning effectiveness.*

**Keywords:** Higher Education, Learning Analytics, Technological Upliftment, Student success, Overall Strategy.

### INTRODUCTION:

Education is considered as the important factor for the development of each and every person without education the individuals should not be aware about what is happening in the world. With the help of education, the aspect regarding the technological usage becomes an easy task. The way of education process is changing day by day. In this modern era the educational policies are changing compared to the past years (Ifenthal, 2017). Education plays an important role development of the economy as well as the individual's career growth. Nowadays educational growth is immensely increasing with the help of technology (Davies, et al., 2017). With the help of technology, learning capacity of the students are also increased. The students are able to learn fastly with the help of technology. In this paper we are going to discuss on the latest technological growth that helps to measure the performance level of the students and how it helped the teachers, institutions and societies in their growth. For the study the LEARNING ANALYTICS MODEL has being chosen (Lan & Chen, 2017).

### OPERATIONAL DEFINITION:

The LEARNING ANALYTICS is a performance measurement model used to evaluate the performance level of the students. Learning analytics is useful for data mining from different sources (Papamitsiou, 2014). Learning Analytics also give teachers definite examination and observing on the individual student level, enabling them to recognize especially instable components, similar to inspiration or consideration misfortunes, before they happen. Instructional originators utilize Learning Analytics data to assess learning materials, change trouble levels, and measure the effect of mediations (Lawson, Beer, Rossi, & Moore, 2016). Moreover, Learning Analytics facilitate

decision-making at the This study uses an Learning Analytics benefits matrix to investigate the current capabilities of Learning Analytics at higher education institutions, explore the importance of data sources for a valid Learning Analytics framework, and gain an understanding of how important insights from Learning Analytics are perceived (Liñán, 2015).

## **HOW IT OPERATES:**

The operations of Learning Analytics according to the particular point of view of the different participants is different according to the performance levels. Possible objectives of Learning Analytics include monitoring, analysis, prediction, intervention, tutoring/mentoring, assessment, feedback, adaptation, personalization, recommendation, and reflection.

### **Monitoring and Evaluation:**

In checking the destinations it helps to track learner's exercises and produce reports keeping in mind the end goal to help basic leadership by the educator or the instructive foundation. Observing is additionally identified with instructional plan and alludes to the assessment of the learning procedure by the instructor with the reason for persistently enhancing the learning condition. Inspecting how the learners utilize a learning framework and breaking down the learners achievements can enable educators to distinguish examples and settle on choice on the future plan of the learning action (Chatti, Dyckhoff, & Schroeder).

### **Prediction and Estimation:**

In prediction, the objective is to build up a model that endeavours to anticipate student learning and future execution, in light of his or her present exercises and achievements. This prescient model would then be able to be utilized to give proactive mediation to learners who may require extra help. The cross examination and expectation of the student execution can boost the educator or the instructive organization in mediation by proposing moves that ought to be made to enable students to enhance their execution.

### **Mentoring and Monitoring:**

Tutoring is basically worried about helping learners with their adapting, frequently exceptionally space particular and constrained to the setting of a course. A mentor, for instance, boosts students in their introduction and presentation into new learning modules and in addition directions of particular topic territories inside a course. Tutoring helps in supporting the student all through the entire procedure – preferably all through the entire life, yet in all actuality restricted to the time that both guide and student are a piece of a similar association. As a major aspect of this help, tutors give direction in vocation arranging, oversee objective accomplishment, and help planning new difficulties, and so on

### **Assessment and feedback:**

The goal is to help the self-appraisal of enhanced productivity and viability of the learning procedure. Rather it is important to get smart criticism of the students and teachers. Smart input gives fascinating data produced in light of information about the client's advantages and the learning setting.

### **Adaptation:**

Adaptation is triggered by the teacher/tutoring system or the educational institution. The goal of Learning Analytics here is to tell learners what to do next by adaptively organizing learning resources and instructional activities according to the needs of the individual learner.

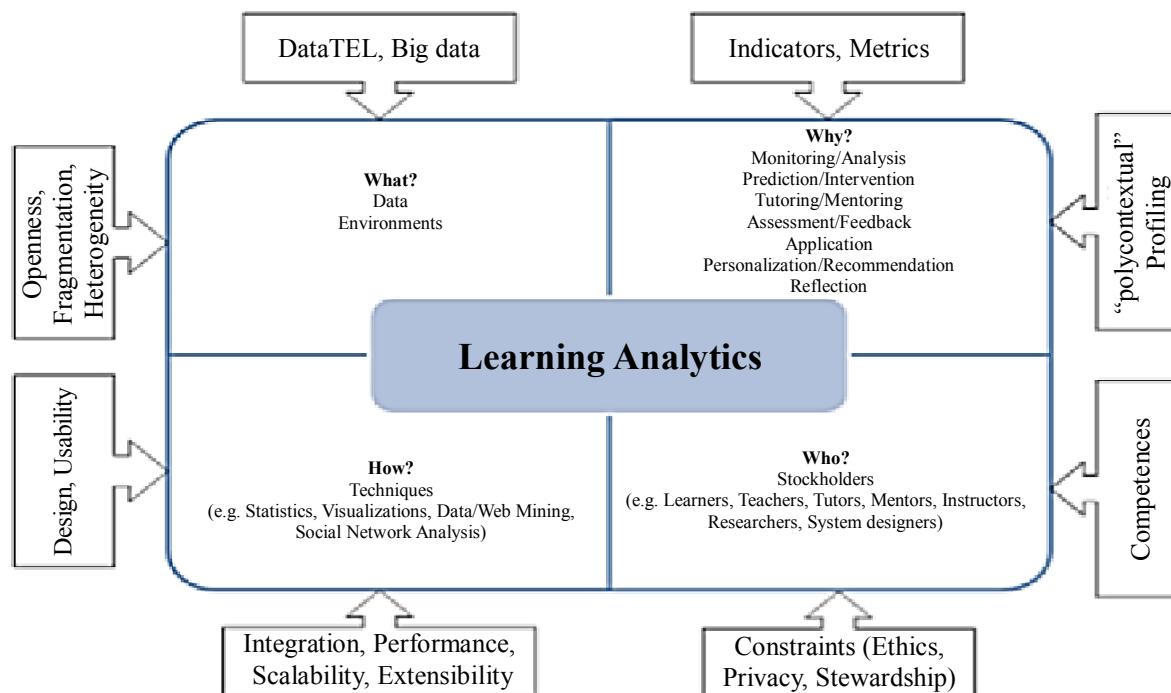
### **Personalization and recommendation:**

In personalization, learning Analytics is very student driven, concentrating on the most proficient method to enable students to settle on their own learning and assesses the execution level of the learners. In a learning model in light of learning push, the data stream is coordinated by the foundation/instructor. In a learning model driven by information pull, the student explores toward information. The goal of Learning Analytics for this situation is to enable students to choose what to do next by prescribing to students learning assets and individuals in light of their preferences and exercises of different students with comparable preferences.

### **Reflection:**

Analytics is an important device to advance reflection. Students and Teachers can benefit by information looked

at inside a similar course, crosswise over classes, or even crosswise examination over the performance to reach determinations and think about the adequacy of their learning or instructing practice. Learning by reflection offers the shot of learning by coming back to and assessing past work and individual encounters with a specific end goal to enhance future encounters and advanced learning.



#### **PURPOSE OF THE ARTICLE:**

1. To highlight the importance of a valid Learning Analytics framework.
2. To create an awareness level among the educational institutions regarding Learning Analytics implementation.

#### **IMPLEMENTATION OF LEARNING ANALYTICS IN DIFFERENT LEVELS:**

##### **Student's Level:**

Learning Analytics helps to collect information regarding the problems faced by the learners through data mining. It helps to personally evaluate the performance level of each student with the help of this technology. Learning Analytics helps the learners in continuously monitoring the issues and rectifying the issues by providing the solution to them immediately which helps them to improve their performance.

##### **Teachers Level:**

Learning Analytics helps to figure out the problems while they are taking classes. It helps to collect data in which the teachers are facing the problems. So, there will be separate evaluation procedures will be undertaken for evaluating the performance of the teachers.

#### **BENEFITS TO STAKEHOLDERS:**

##### **Students:**

1. Improve their performance level.
2. Finding the solutions to the problems.
3. Proper monitoring.
4. Time to time Feedback

##### **Teachers:**

1. Helps to adapt more innovative teaching techniques.

2. Good relationship with the learners.
3. Implementation of technology towards teaching.

**Institutions:**

1. Performance evaluation both for teachers and students.
2. Helps in satisfying the needs and wants of the learners and the teachers.
3. Ranks the institutions to higher levels.

**Society:**

1. Helps to create learners with more knowledge.
2. Ideas can be easily generated.
3. Eradication of problems arising from different educational institutions.

**CONCLUSION:**

Advanced instruments have turned out to be relatively omnipresent, and have actuated new methods for comprehension and upgrading the learning procedure. Learning would now be able to be streamlined and countless from the developing field of learning Analytics have shown how such devices can be utilized to really be valuable to learners, instructors and even organizations. As appeared in the past area, learning Analytics is presently a functioning and multi-disciplinary research field, bringing promising responses to numerous difficulties that Higher Education establishments are confronting.

A Learning Analytics venture inside an establishment isn't just an exploration/advancement movement or a mechanical issue, yet additionally a hierarchical issue. Besides, the gathering of learner's information actuates various moral and protection issues and difficulties that must be precisely considered and can be tended to in an assortment of routes, contingent on the institutional and social setting. The writing reports that the inclusion of learners and staff in the endorsement and appropriation of open and straightforward "codes of training" and approaches for the utilization of learning Analytics is sure.

The financial issues identified with the internationalization of training, the improvement of open instruction and the expanding request from the general public for long lasting learning are likewise eminent viewpoints. The computerized change of advanced education is out and about, learning Analytics is an approach to help the rise of a mindful, comprehensive, customized, online instructive framework.

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