

ANALYSIS OF EDM IN VARIOUS APPLICATIONS

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Abstract: Educational Data Mining (EDM) is a research area which includes the student learning methodology. EDM helps to develop the student learning software in the field of education. The software which is developed for student learning environment helps to achieve best learning practices and modifies the usual learning trends. This analysis of educational data mining application provides various objective of learning environment system and explores the research about EDM approaches.

Keywords: EDM, EDM applications, Student learning environment.

I. INTRODUCTION

Data mining is the process of discovering interesting patterns from massive amounts of data. As a knowledge discovery process, it typically involves data cleaning, data integration, data selection, data transformation, pattern discovery, pattern evaluation, and knowledge presentation. The major dimensions of data mining are data, knowledge, technologies, and applications[2]. It has developed by various field of technologies and increased in the growth of different types. One of the type in datamining is Education datamining which has incredibly applied to the field of handling educational based data Educational Data mining is a research area which utilizes data mining techniques and research approaches to understand how student can learn in different kind of environment. Computer technologies include machine learning and data mining tasks. EDM handles variety of data from data repository. The goal or objective of the student learning software is to measure the student knowledge and their level of understanding. This analysis shows the list of different learning application in the field of education.

II. PERSONAL LEARNING ENVIRONMENT

The term personal learning environment (PLE) describes the tools, communities, and services that constitute the individual educational platforms learners use to direct their own learning and pursue educational goal. teaching is less a matter of data transmission and more a collaborative exercise in collection, orchestration, remixing, and integration of data into knowledge building [1]. Personal Learning environment ensures that students are learning with self- motivation. The encouragement on this environment is possible when students are started to learn using educational learning softwares.

III. LEARNING SOFTWARE

A) Myclassroom

MyKlassroom founded with the vision of connecting the world of education through the social web and virtual classrooms. Myclassroom is a social e-learning platform built to enhance the learning experience of students. It is a revolutionary idea to enrich classroom's social experience by engaging diverse group of faculty and students across the globe in virtual space.

Bringing the real classroom experience online Myclassroom.com is a powerful blend of Social networking and E-learning, which provides an online collaborative platform for teaching and learning. MyKlassroom.com facilitates the next generation classroom, which would provide a structured access to information, a forum to discuss and assimilate information, online lectures, a faculty to moderate discussions, and 24/7 access to classrooms anywhere anytime.

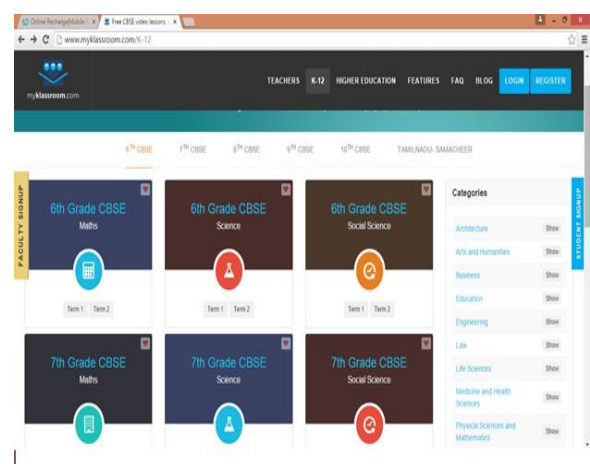


Figure1: Different courses handled by Myclassroom

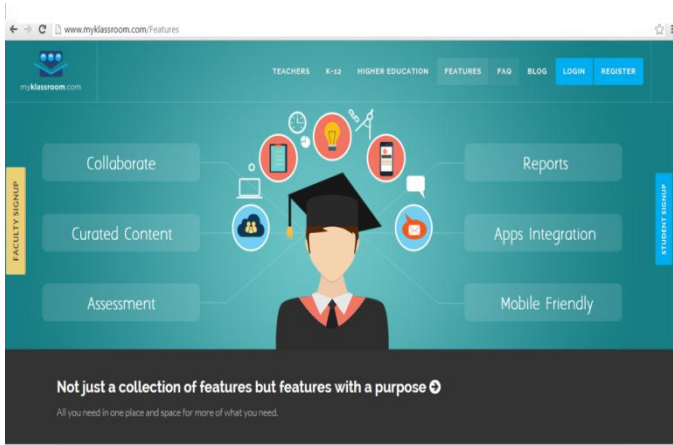


Figure 2: Features of MyKlassroom

Features:

1. It can provide report on assessment, test modules, links related contents.
2. MyKlassroom application integration is possible. The application can be used as a mobile app.
3. Can conduct an assessment
4. Classroom collaboration over the system
5. It ensures the concept of Peer learning

B) Active inspire

ActiveInspire is the software you will use with the Promethean ActivBoard. ActiveInspire provides you with the tools you will need to create flipcharts (think of a flipchart as being an interactive powerpoint) and interact with other digital resources. Active Inspire comes with hundreds of free resources to enhance the presentation. [3] Promethean Planet created by teachers, for teachers, Promethean Planet is a unique teaching, sharing and support community which is the place to connect, create, and change the classroom environment [4].

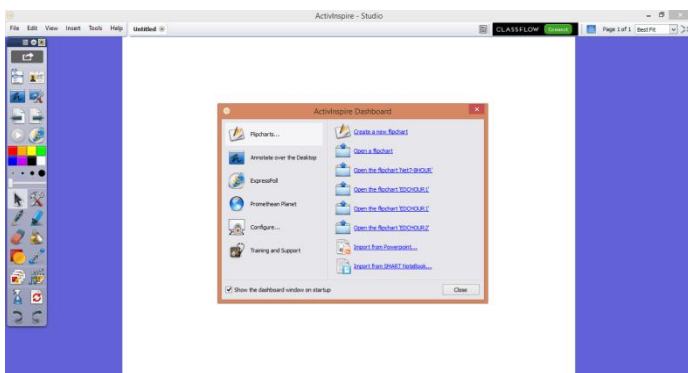


Figure 3: ActiveInspire Studio - Dashboard

Features:

- Access free and premium content from promethean planet
- Import a variety of file types including powerpoint, pdf and smart note book
- Customize the interface
- Amazing new page template and resource library

- Learners response integration

C) Google Classroom

Google Classroom is a blended learning platform for schools that aim to simplify creating, distributing and grading assignments in a paperless way. It was introduced as a feature of Google Apps for Education following its public release on August 12, 2014. Its aim is to be a paperless educational system.

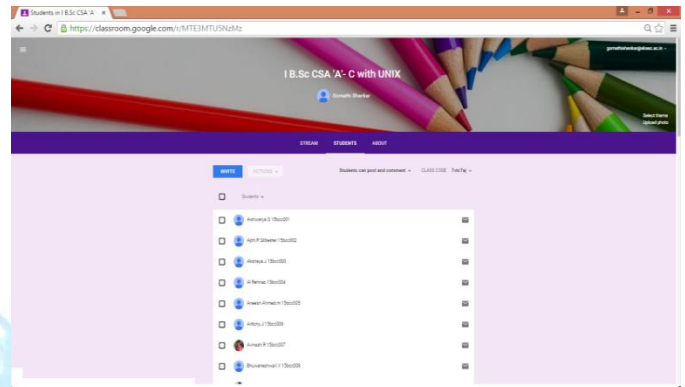


Figure 4: Google Classroom Page

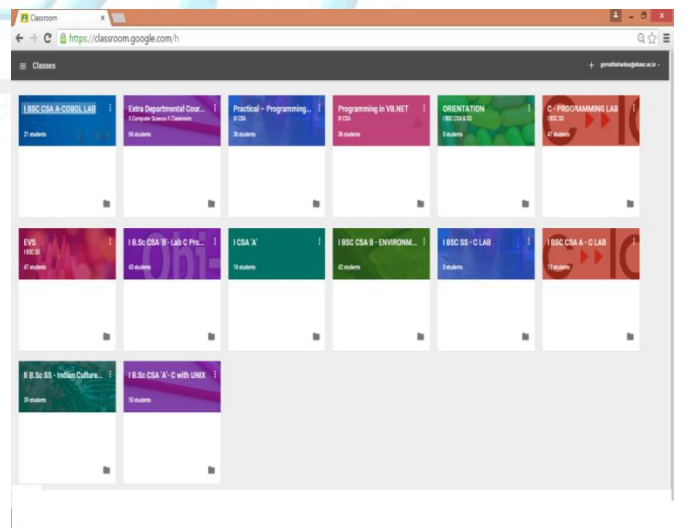


Figure 5: Different Subjects supported by google classroom

Classroom, a part of Google’s Apps for Education product lineup, first debuted in 2014 just ahead of the start of the school year. It uses Google’s Docs, Drive and Gmail to make assignment creation and tracking easier for teachers, while also allowing them to make announcements, ask questions and respond to student questions in real-time. Google Classroom, the company’s educational initiative that launched last year to allow teachers and students to communicate and collaborate with each other using Google tools and services, has today received a number of new features, the most notable being a new Classroom API for admins, and a Classroom share button. The latter lets developers or schools simplify sharing

content – including links, videos and images from around the web – with the Classroom platform [5]

Features:

- We can conduct a test in google classroom by posting the question.
- Posted assignments can be Reuse.
- It Improve calendar integration.
- Youtube functionality

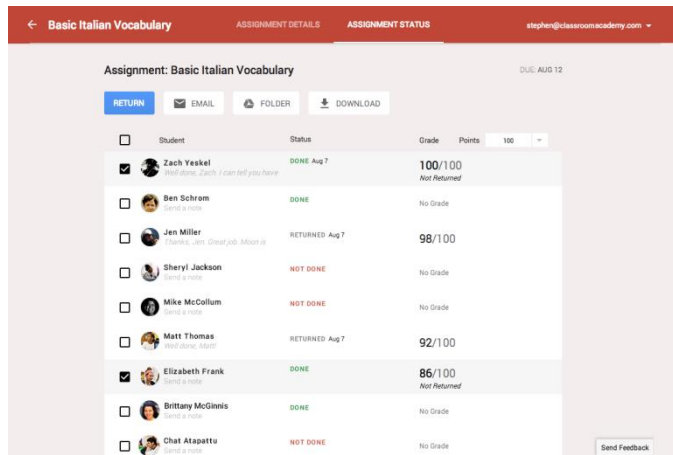


Figure 6: Basic Italian Vocabulary in google classroom

D) M-Leaning

The term M-Learning or "Mobile Learning", has different meanings for different communities, that refer to a subset of E-Learning, educational technology and distance education, that focuses on learning across contexts and learning with mobile devices [9]. Mobile information and communication technologies are important enablers of the new social structure. It refers mobile technology and mobile learning. wireless technology can dramatically improve learning and bring digital content to students. Technology-rich activities can sustain high levels of student engagement and peer collaboration compared to less technology focused activities. A majority (52 percent) of students in grades 6-12 believe that having access to a tablet computer is an essential component of their ultimate school. The value of mobile devices is that they allow students to connect, communicate, collaborate and create using rich digital resources [8].

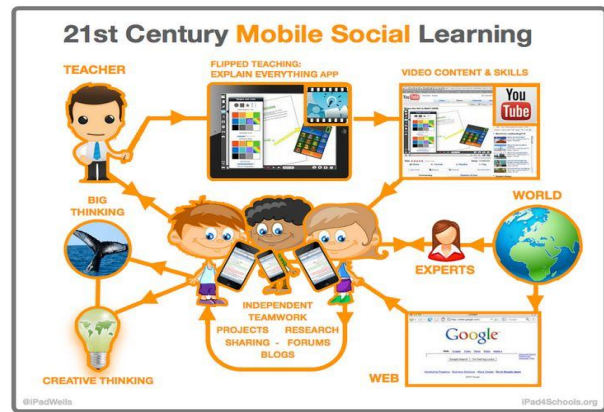


Figure 7: M-Learning Environment

Features of M-Learning

- Relatively inexpensive opportunities, as the cost of mobile devices are significantly less than computer device.
- Multimedia content delivery and creation options.
- Continuous and situated learning support.
- Decrease in training costs.
- They are affordable, can be easily distributed and thus hold great potential for handling future enhancement with easy access.

V. CONCLUSION

This paper provides the analysis of understanding the various educational data mining applications. These are all the several softwares which is available and published by different organization and motivate the students from the usual learning environment. The applications which has developed for the purpose of learning in the field of educational datamining has been improving with customized design methodologies.

VI. REFERENCES

[1] <https://net.educause.edu/ir/library/pdf/eli7049.pdf>
 [2] <http://www.sciencedirect.com/science/article/pii/B9780123814791000010>
 [3] <http://www2.hawaii.edu/~shavonn/activclassroom/activinspire.html>
 [4] <http://prometheanplanet.com/en/>
 [5] <http://techcrunch.com/2015/06/29/google-expands-its-educational-platform-classroom-with-a-new-api-share-button-for-websites/#.goh6jte:w9qy>
 [6] https://en.wikipedia.org/wiki/Google_Classroom
 [7] <http://www.irrod1.org/index.php/irrod1/article/view/350/894>
 [8] <http://www.brookings.edu/research/papers/2013/09/17-mobile-learning-education-engaging-students-west>
 [9] http://www.ijceronline.com/papers/Vol3_issue6/part%203/P03630930100.pdf