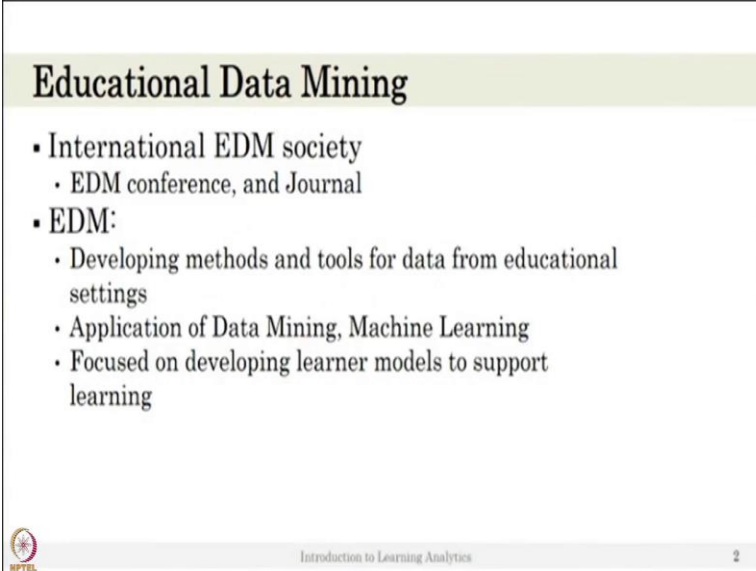


Introduction to Learning Analytics
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Lecture – 02
LA, EDM and Academic Analytics


In this lecture, we will talk about Learning Analytics Educational Data Mining and Academic Analytics. As we saw in the last video the society of learning analytics research is governing the conference is related to learning analytics and also the journal. However, learning analytics is not the only society which work with the learner data.

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Educational Data Mining

- International EDM society
 - EDM conference, and Journal
- EDM:
 - Developing methods and tools for data from educational settings
 - Application of Data Mining, Machine Learning
 - Focused on developing learner models to support learning

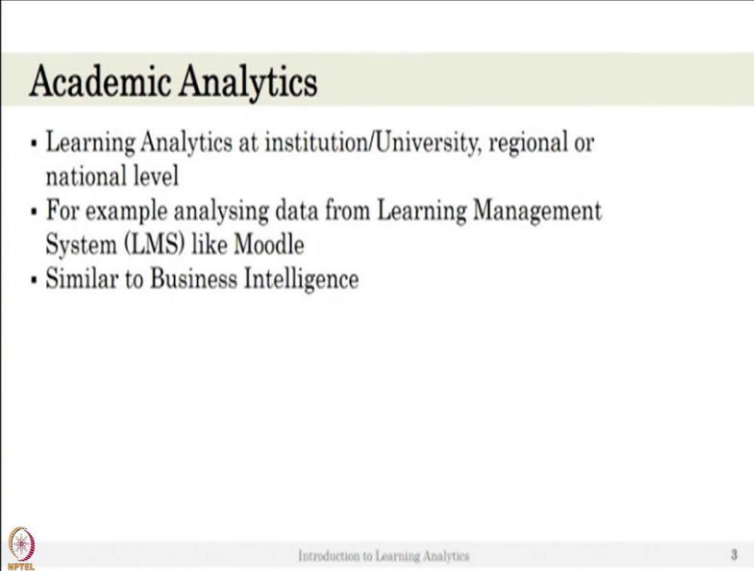
 Introduction to Learning Analytics 2

So, there is a other society called the international EDM society. In fact, it started before the solar formed and the first conference on EDM that is Educational Data Mining conference started 3 years before the learning analytics conference. Like solar EDM also have the EDM conference and they have a journal.

EDM actually focuses on developing methods and tools for data from educational settings. Whereas learning analytics is tries to understand the student's behavior trying to model the students in order to improve the student's performance, also improve the teaching strategy, so the teachers can use those strategies immediately. Whereas, EDM is mainly focused on researchers; however, currently this is not true both EDM and LA working on developing models, both communities are involving the teachers in it.


So, EDM is mainly focused on research when it started. In EDM, the more application of data mining, machine learning has been used. So, EDM is focused on developing learner models to support learning.

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Academic Analytics

- Learning Analytics at institution/University, regional or national level
- For example analysing data from Learning Management System (LMS) like Moodle
- Similar to Business Intelligence

 Introduction to Learning Analytics 3

Similarly, there is another group called academic analytics. So, this has been this term academic analytics has been introduced like a decade ago, and it has been talked about applying learning analytics at the higher level like a institute level or the university level or the district level or the government decision on these learning analytics data.

Academic analytics is learning analytics applied a launch data and is to inform the authorities who can take decisions and policy changes in the institute or the district level or an education sector. However, if you consider the academic analytics in a college settings or the university settings, we can analyze the data from learner management system like LMS like a Moodle or blackboard. What happens here is when we create LMS for this individual course, a teacher can access to the how many students is participate in the course, what are the assignments they submitted what are the performance of each students.

But when we applied this LMS to the different courses in the whole university, there are many courses will be run simultaneously, in the university many teachers will be teaching the course. You can collect all this data and apply to understand how many teachers is coming to the classes, what are the courses is performing well, what courses is not performing well.

So, this kind of information can give academic analytics for the academics to understand what is happening in the course works; what is happening in the college. So, these information will help you to change the course structure in the next semester. However, recently in last couple of years the academic analytics word is replaced by similar to the business intelligence. So, there is no more academic analytics in the research field; it is called business intelligence.


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Activity

Academic Analytics

Which of the below is not classified as academic analytics?

- Attendance of teachers
- Pass percentage in course X
- Performance of a school A in a City B
- Graduation rate of students

Introduction to Learning Analytics4

Let us start with the activity, which of the below is not classified as the academic analytics that is attendance of teachers, pass percentage in a course X, performance of a school A in a city B or graduation rate of the students. This is a reflection spot question. Please pass the video and write down the answer for this question. Once you completed this activity, you can resume the video to continue.


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Activity

Academic Analytics

Which of the below is not classified as academic analytics?

- Attendance of teachers
- **Pass percentage in course X**
- Performance of a school A in a City B
- Graduation rate of students

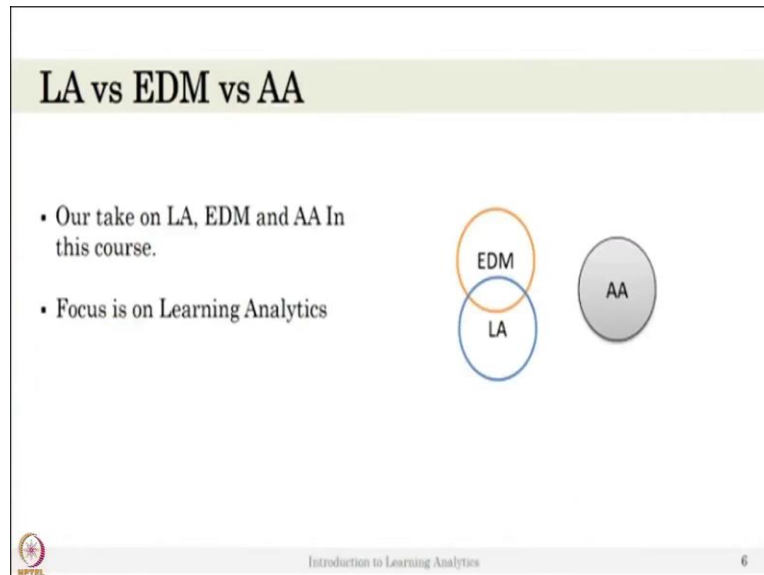
Introduction to Learning Analytics



So, the answer to this question is pass percentage in course X. All other options are related to academic analytics such as attendance of teachers in the whole university or the performance of the school A in City B in the district or graduation rate of students in a college. But the pass percentage in the course is related to a particular course, a particular teacher you want to know about how many students passed in this particular course.

So, this is not academic analytics compared to the other three options. However, if you want to apply academic analytics on the college level to understand how many courses has a pass percentage more than 80 percent or at some certain level this might lead to academic analytics. When compared to the other three options, this is not academic analytics.

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In our course, we will not talk about academic analytics. Academic analytics is a gray area for us because it is replaced with the business intelligence; we will not talk about academic analytics in our course.

However, we will talk about educational data mining and learning analytics. As I mentioned earlier educational data mining and learning analytics or almost similar now and both to apply developing the models for learners and also to understand the learners performance, to improve the learners also share the data with the teachers. So, we talk about learning analytics and EDM interchangeably. We will focus only your learning analytics in this course, we will use the word learning analytics going forward, but wherever when you see their educational data mining our course content can be applied there.