

# OU & LAD Learning Analytics Dataset

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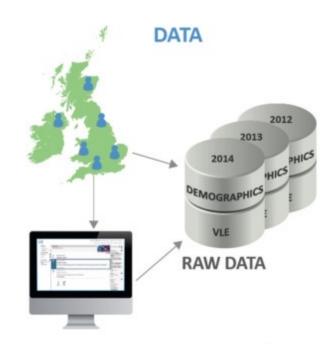
https://www.nature.com/articles/sdata2017171

# **About Open University**



- One of the largest distance based learning universities worldwide
- Approx. 180,000 students
- Teaching delivered remotely via Moodle-like system
- During the degree students participate in several courses (modules)
- 1 module ~ 60 credits
- Wide variety of units/departments exists to support students

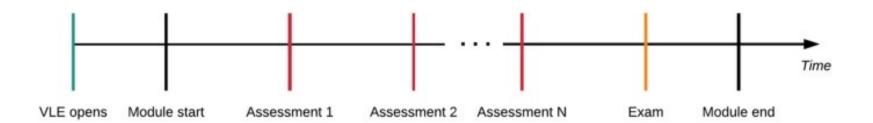




### **About courses**



- Each academic year has two semesters winter (J) and summer (B)
- Typical semester last approximately ¾ of the year
- Students interacts with the Virtual Learning Environment, which contains all the learning resources, assessments and tools for contacting their teachers and peers
- Course-presentation covers multiple topics, each usually ends with the assessment => assessments can be considered as milestones in coursepresentation



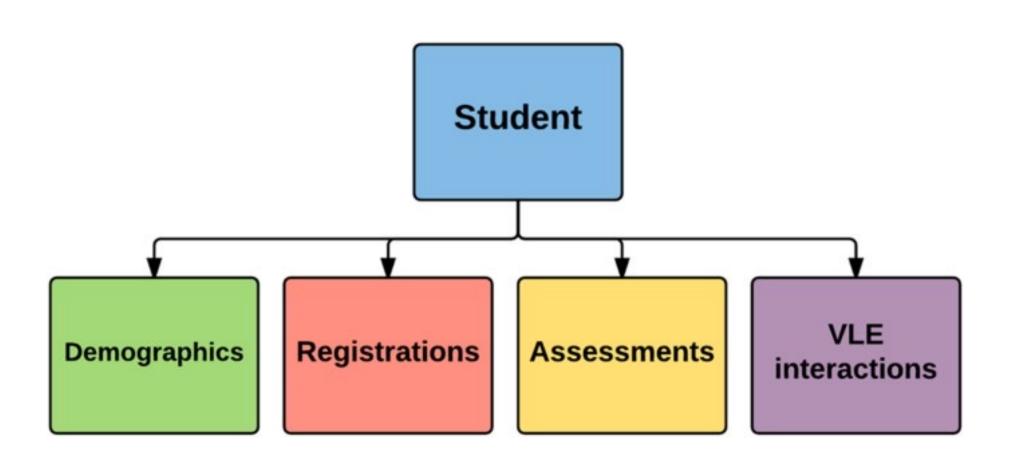
# **Dataset info**



Module	Domain	Presentations	Students
AAA	Social Sciences	2	748
ВВВ	Social Sciences	4	7,909
ССС	STEM	2	4,434
DDD	STEM	4	6,272
EEE	STEM	3	2,934
FFF	STEM	4	7,762
GGG	Social Sciences	3	2,534

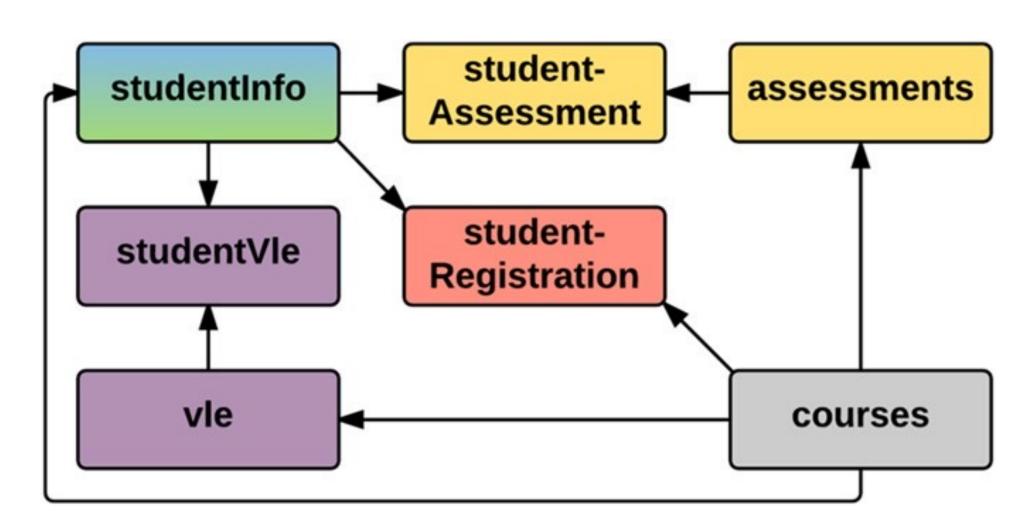
# **OULAD structure**





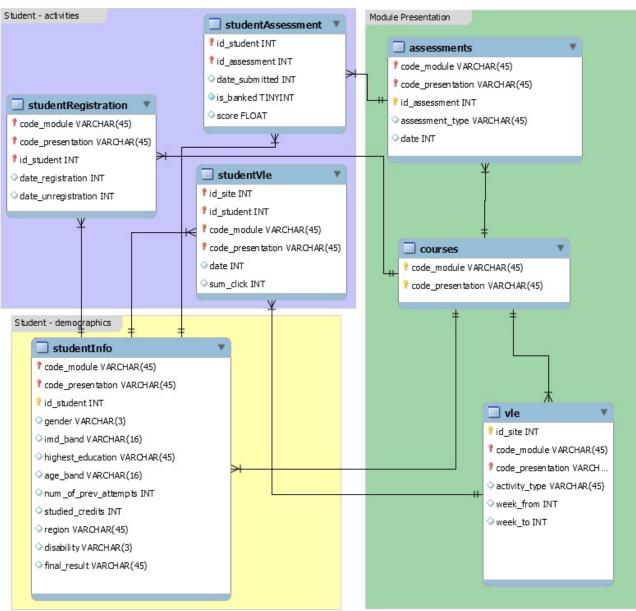
### **OULAD structure**





# **E-R diagram**





# student\_info



- code\_module module identification code on which the student is registered.
- **code\_presentation** presentation identification code during which the student is registered on the module.
- id\_student the unique student identification number.
- gender student's gender.
- region the geographic region, where the student lived while taking the modulepresentation.
- highest\_education the highest student education level on entry to the module presentation.
- *imd\_band* the IMD band of the place where the student lived during the module-presentation.
- age\_band a band of student's age.
- num\_of\_prev\_attempts the number of how many times the student has attempted this module.
- studied\_credits the total number of credits for the modules the student is currently studying.
- disability indicates whether the student has declared a disability.
- final\_result student's final result in the module-presentation.

### assessments



- code\_module module identification code, to which the assessment belongs.
- code\_presentation presentation identification code, to which the assessment belongs.
- id\_assessment assessment identification number.
- assessment\_type a type of assessment. Three types of assessments exist—Tutor Marked Assessment (TMA), Computer Marked Assessment (CMA) and Final Exam (Exam).
- date information about the cut-off day of the assessment.
- weight the weight of the assessment. Typically, Exams are treated separately and have the weight equal to 100%; the sum of all other assessments is also 100%.

### student\_assesment



- id assessment the assessment identification number.
- *id\_student* the unique student identification number.
- date\_submitted the day of assessment submission.
- *is\_banked* the status flag indicating that the assessment result has been transferred from a previous presentation.
- score the student's score in this assessment. The range is from 0 to 100. The score lower than 40 is interpreted as Fail. The marks are in the range from 0 to 100.

### courses



- code\_module code name of the module, which serves as the identifier.
- code\_presentation code name of the presentation.
- *length* the length of the module-presentation in days from module start date to module end date.

# student\_registration



- code module the module identification code.
- code\_presentation the presentation identification code.
- id\_student the unique student identification number.
- date\_registration the day of student's registration for the module presentation.
- date\_unregistration the day of student unregistration from the module presentation. Students, who completed the course have this field empty. Students who unregistered have Withdrawal as the value of the final\_result in the studentInfo table.

### vle



- id\_site the identification number of the material.
- code\_module the identification code for the module.
- code\_presentation the identification code of the presentation.
- activity\_type the role associated with the module material.
- week\_from the week from which the material is planned to be used.
- week\_to the week until which the material is planned to be used.

### student\_vle



- code module the module identification code.
- code\_presentation the presentation identification code.
- *id\_student* the unique student identification number.
- id\_site the VLE material identification number.
- date the day of student's interaction with the material.
- sum\_click the number of times the student interacted with the material.