Analysing student VLE behaviour intensity and performance

Jakub Kuzilek, Jonas Vaclavek, Zdenek Zdrahal, Viktor Fuglik

CZECH INSTITUTE OF INFORMATICS ROBOTICS AND CYBERNETICS CTU IN PRAGUE

Introduction

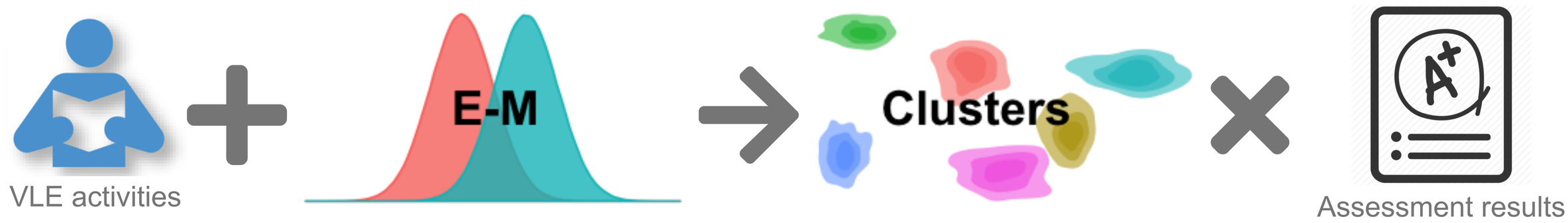
Is it possible to uncover natural grouping of students based on their VLE activities without prior knowledge of their results?

Data

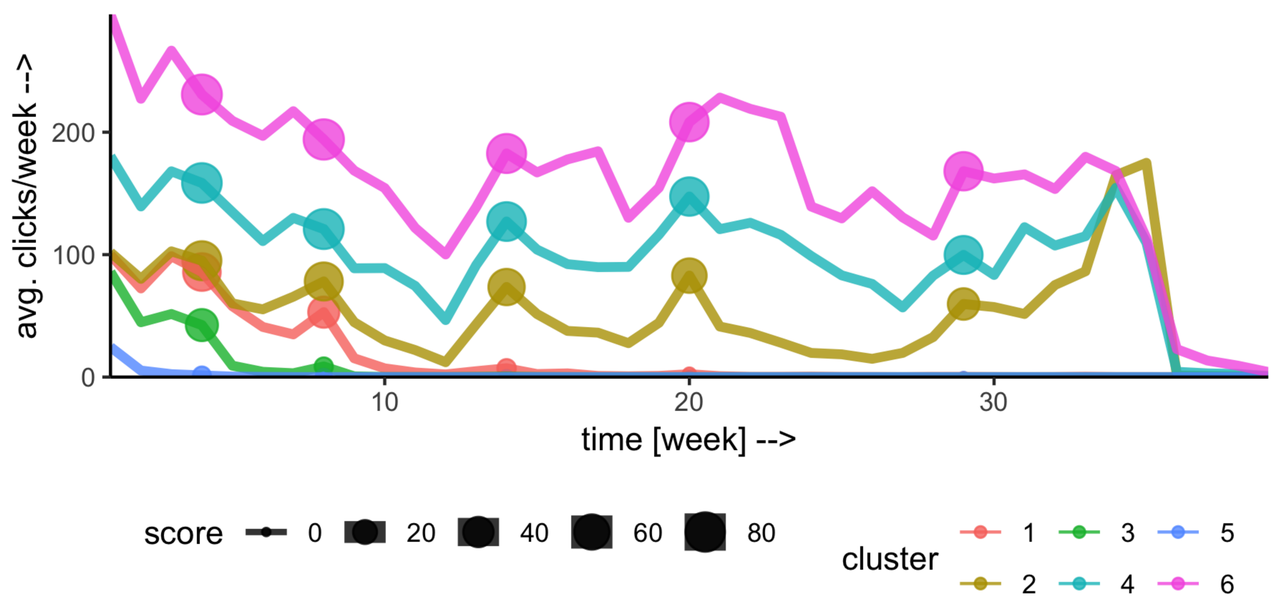
OULAD

Learning Analytics Dataset

Methods



Results



Conclusions

Cluster 6: the most active students; high scores in assessments

Cluster 4: students active in VLE for the whole course; high scores in assessments

Cluster 2: students active before the assessments; very active before exam (week 36); high scores at the beginning

Cluster 1: students active until week 15; low performing since 2nd assessment

Cluster 3: inactive since second assessment; low scores in second assessment

Cluster 5: inactive students since week 2/3; low performance in the first assessment

References

Scrucca L. et al. (2016) mclust 5, The R Journal 8/1

Kuzilek J. et al. (2017) OULAD, Sci. Data 4:170171

Contact

Jakub Kuzilek

jakub.kuzilek@cvut.cz
@jakub_kuzilek
github.com/jakubkuzilek