

Big data and reduction of early school leaving

A Dutch prediction model succeeds to keep more youngsters in the school while generic approaches in general are not so effective.

In the Netherlands on a year's basis approximately 35.000 youngsters do not complete their (IVET) study. Because of that they do not possess a start qualification. The impact on their lives can be great: ranging from long term youth unemployment to social and inclusion issues as well as criminality. Local authorities in the bigger cities of NL do have difficulties in identifying those youngsters who really need help, thus relying only on more generic and general measures.

This situation has challenged data science company Ynformed to design a prediction model. This model predicts whether an individual youngster will succeed in finishing the education without specific interventions of the school or local authority. This model now predicts with 85% security whether a youngster will gain a start qualification. This risk analysis provides all the necessary input to take action for only those youngsters who really need it, thus making more tailor-made and individualized guidance possible.

One of the applications is that the model is able to predict whether a youngster who is missing classes is a potential drop-out or not. If it is a student at risk additional guidance can be arranged for like a visit at home. In this way one can offer risk students something extra without withholding general measures to all others. Ynformed adapts the prediction model to the population parameters of a local authority.

At the moment already the model has found its way of usage in different local authorities throughout the Netherlands. The model only makes use of career related information, and does not use demographic or personal characteristics of students. Therefore the data usage is less threatening for privacy issues making implementation more easy.

Source: www.gemeente.nu