

SARP

Student Analytics Reflective Planner

An outline idea - expressed as a set of mockup screens - for the LAK17 Hackathon, taking Tribal Student Insight as a jumping-off point.

Adam Cooper, Tribal Group, March 2017

Jumping Off Points

Inspiration drawn from challenges 1 and 7 in the slide deck at

- Making predictive analytics safe for students
- Data literacy playground (more could be woven in from here)

Aims = to give students...

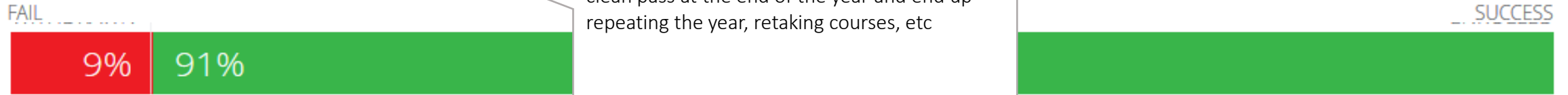
- Visibility of the attributes used in the analytics
- Indication of the influence of these factors on the chance of outcomes according to historical data in their school
- Scaffolding for self-efficacy
 - consider why some features correlate with the outcome
 - assess their situation
 - formulate plan to deal with difficulties, address weaknesses, build on strengths, etc
- Contextualised links to hints on strategies, practical action, sources of help
- ... but to NOT give them a prediction of their level of risk
- and to try to navigate around “gaming”, chasing proxies, various other potential negative aspects

Risk Factors in the School of Economics

Risk of Non-progression



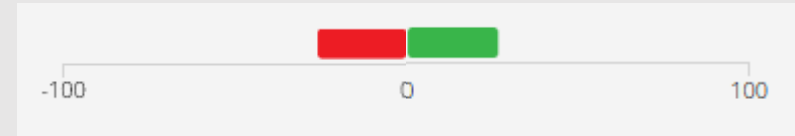
The bar shows the historical chance that students in the School of Economics fail to get a clean pass at the end of the year and end up repeating the year, retaking courses, etc



Demographic Features

You can't change these but you can ask "what makes a typical ...?", "which of those aspects contributes to success?", "what am I like?"

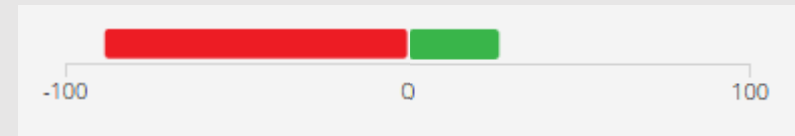
INFLUENCE RANGE



Intrinsic Course Factors

You can't change these either, but you can ask "what makes it harder to succeed?" and "how do I deal with the challenges?"

INFLUENCE RANGE



Attendance Levels

Is your behaviour risky?



Risk Factors in the School of Economics

Risk of Non-progression



Demographic Features

You can't change these but you can ask "what makes a typical ...?", "which of those aspects contributes to success?", "what am I like?"

Country

INFLUENCE (United States -100 | Germany +100)



Income

INFLUENCE (>= 1000 < 3000 -29 | < 1000 +26)



Gender

INFLUENCE (F -6 | M +3)



Parents Education

INFLUENCE (Unknown -16 | Yes +50)

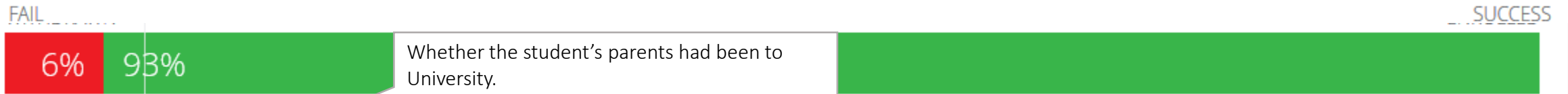


Sex

INFLUENCE (M -10 | F +31)



Risk of Non-progression



Whether the student's parents had been to University.

Parents Education ?



You are in a lower risk group.

What factors make this a lower risk group? ?

How well do you match the typical? ?

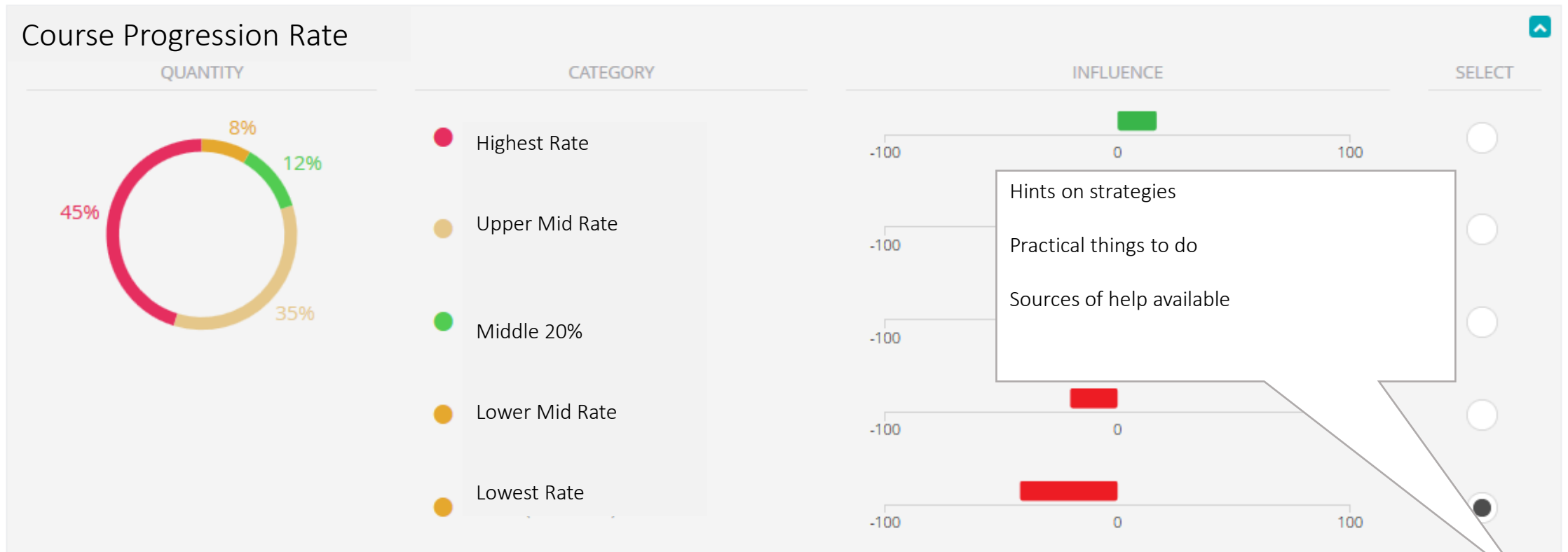
Building on strengths I will... ?

Risk of Non-progression



Course Progression Rate





You are in a higher risk group. This course has among the lowest progression rates in the institution.

What factors make this course hard to pass?



How well equipped are you to overcome..?

Action plan to overcome difficulties



Attendance Rate in Last 4 Weeks



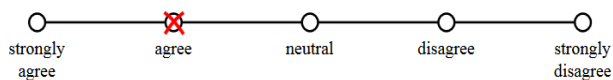
You are in a higher risk group.

What are the benefits of attendance at class? ?

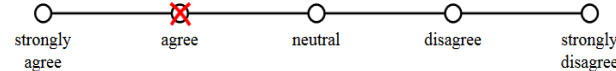
What is it which makes your attendance problem?

Action plan ... ?

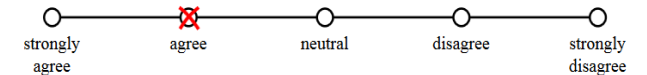
Good attendance is important for success:



Good attendance is difficult for me:



Delivering on the plan will be hard:



Some Further Ideas

- Link to ELLI (effective lifelong learning inventory) and CLARA (<https://utscic.edu.au/tools/clara/>)
 - Could just sit as a deepening tool without being connected to analytics
 - Could over time collect enough data to begin to tell compelling stories about the development of self-efficacy and outcomes.

Created by Adam Cooper, Tribal, on March 14th 2017 at the 7th International Learning Analytics and Knowledge Conference in Vancouver, Canada.

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