



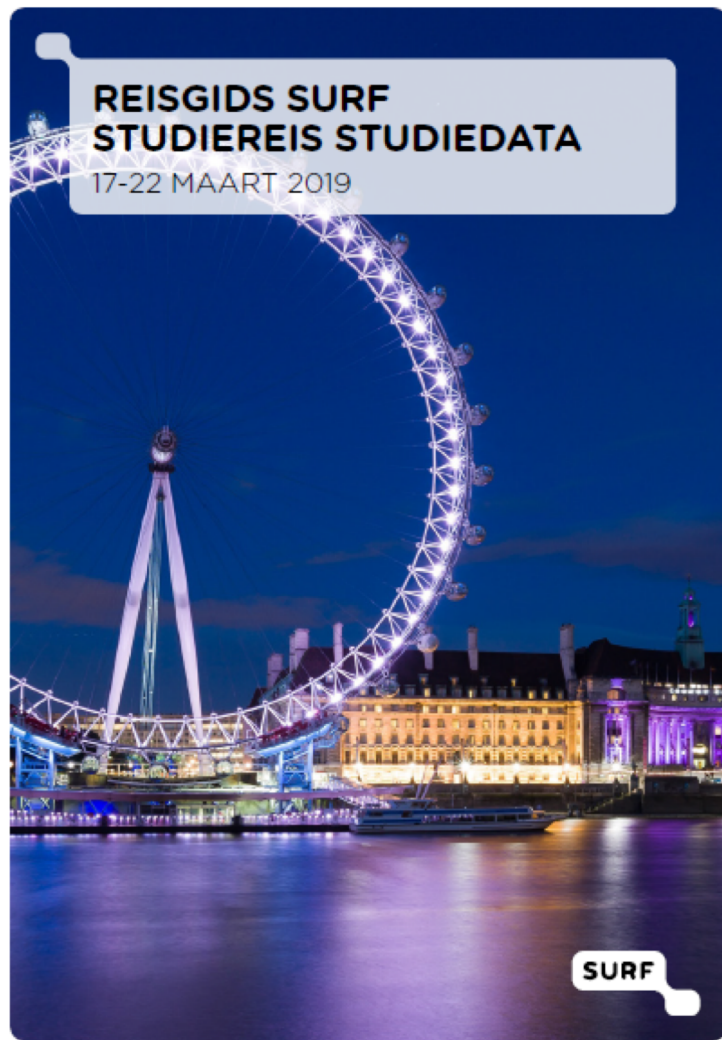
The Open
University



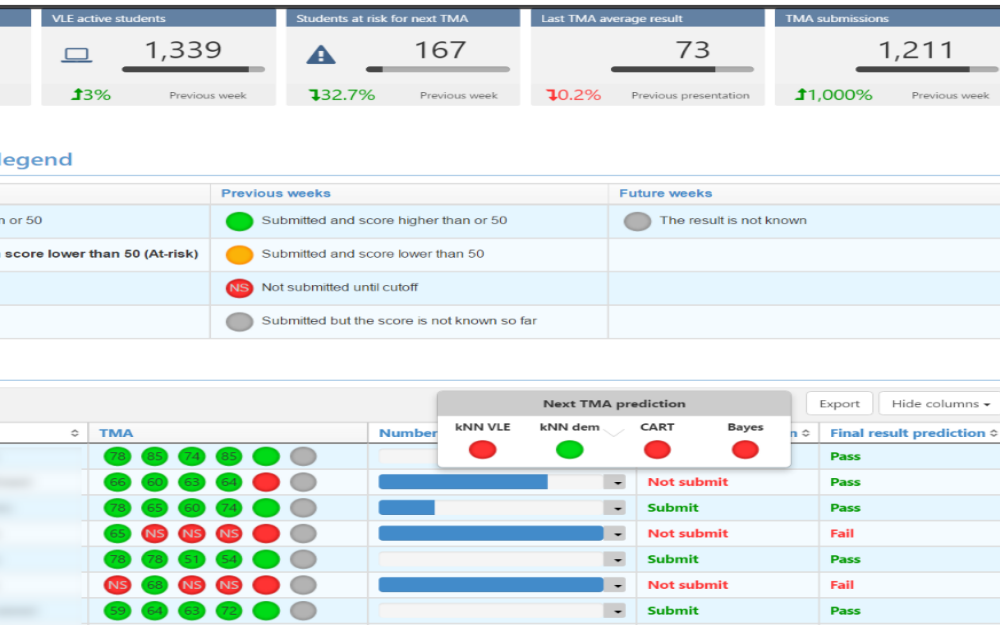
@DrBartRienties
Professor of Learning Analytics

Kevin Mayles
Head of Quality Enhancement and LA

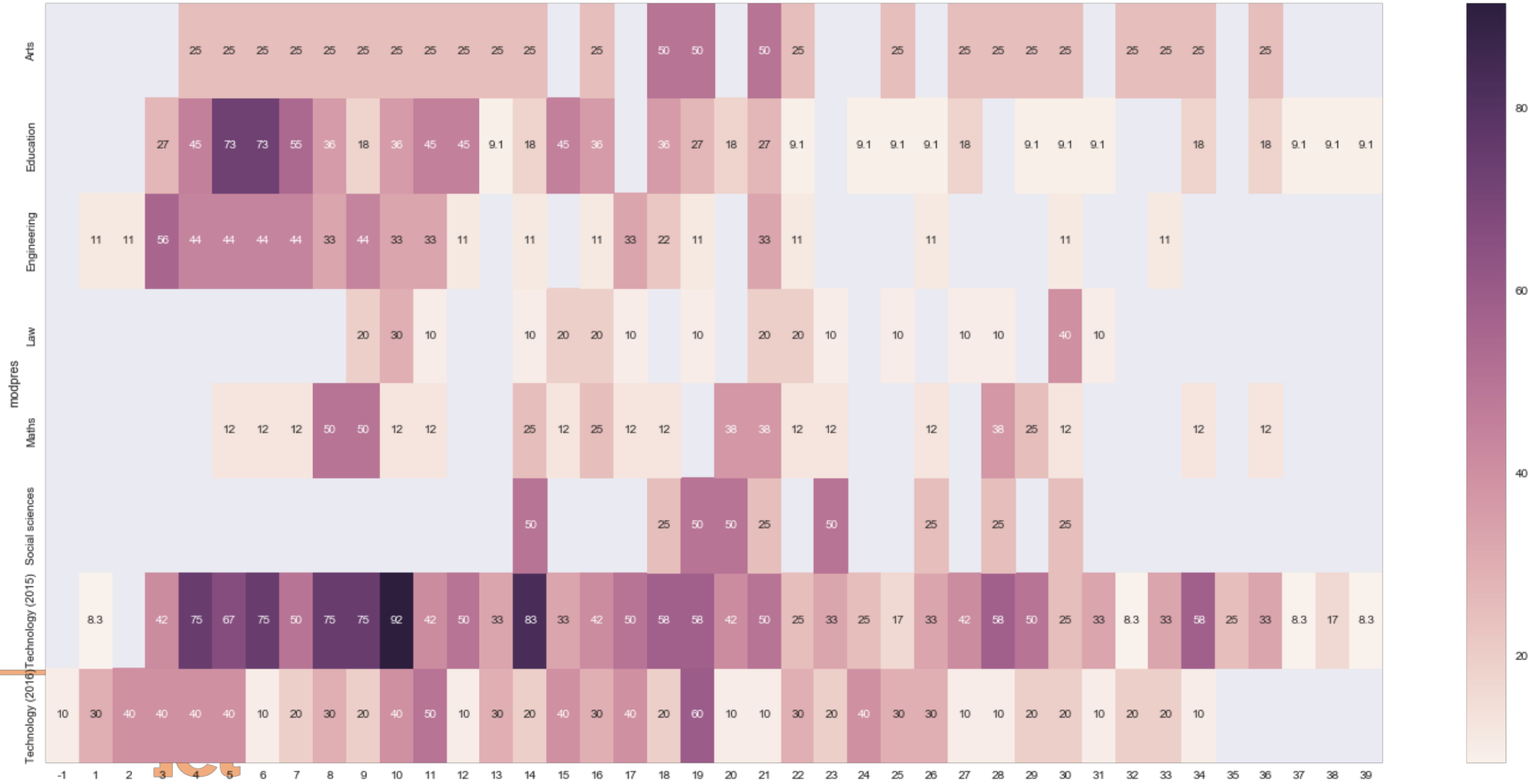
Prof John Dominigue
Head to Knowledge Media Institute



So what happens when you give learning analytics data about students to teachers?



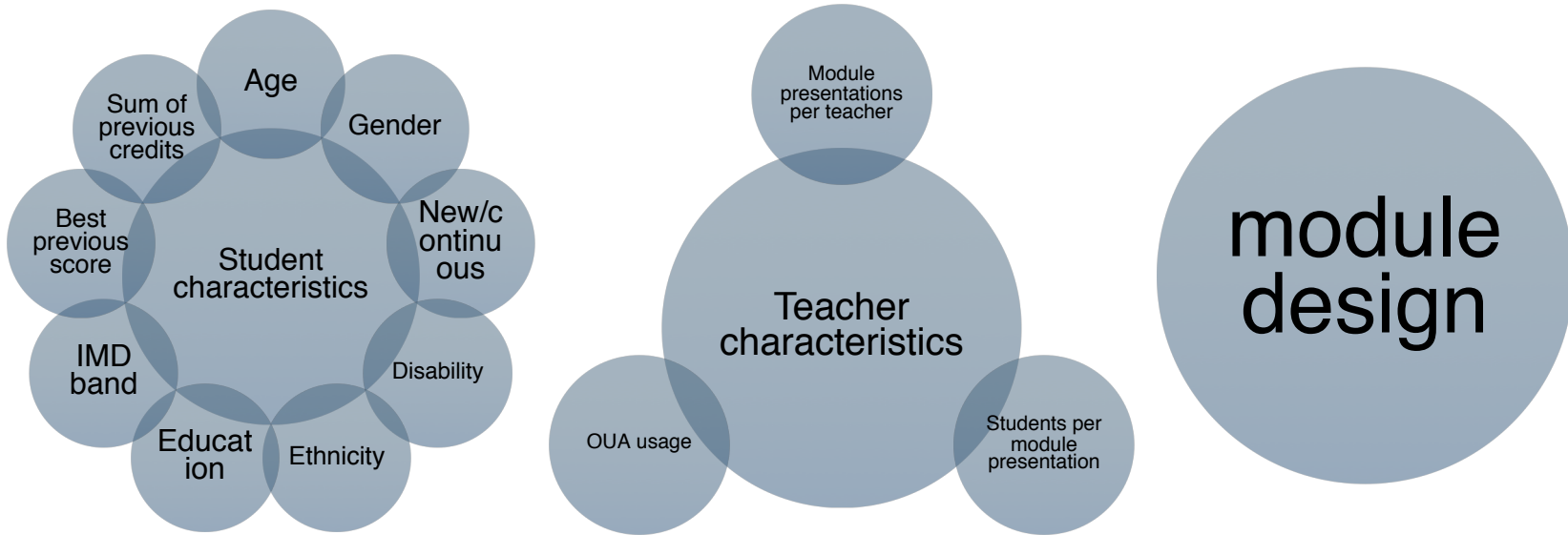
1. How did 240 teachers within the 10 modules made use of PLA data (OUA predictions) and visualisations to help students at risk?
2. To what extent was there a positive impact on students' performance and retention when using OUA predictions?
3. Which factors explain teachers' uses of OUA?



Herodotou, C., Rienties, B., Borooa, A., Zdrahal, Z., Hlosta, M., & Naydenova, G. (2017). Implementing predictive learning analytics on a large scale: the teacher's perspective. Paper presented at the *Proceedings of the Seventh International Learning Analytics & Knowledge Conference*, Vancouver, British Columbia, Canada pp. 267-271

Regression analysis

Which factors better predict pass and completion rates?

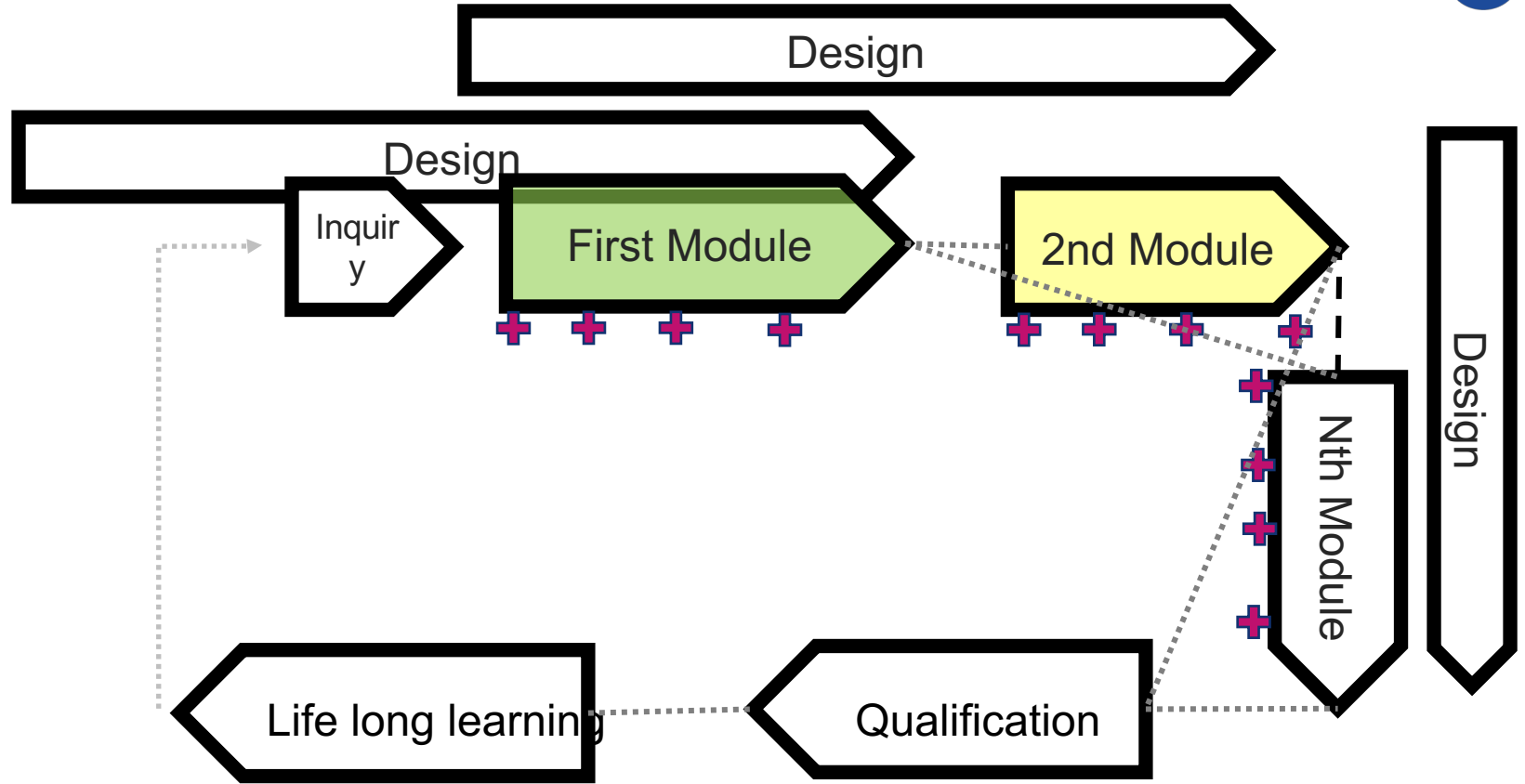


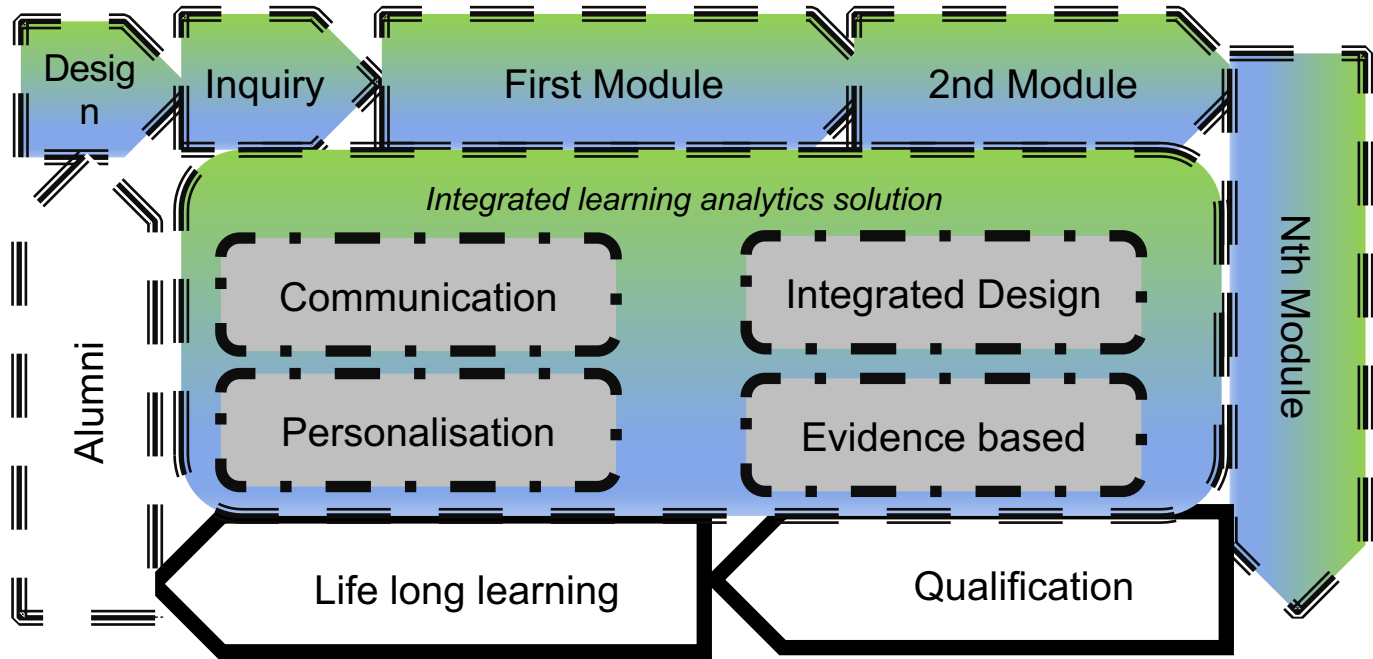
Logistic regression results (pass rates)

Significant model (pass: $\chi^2 = 76.391$, $p < .001$, $df = 24$).

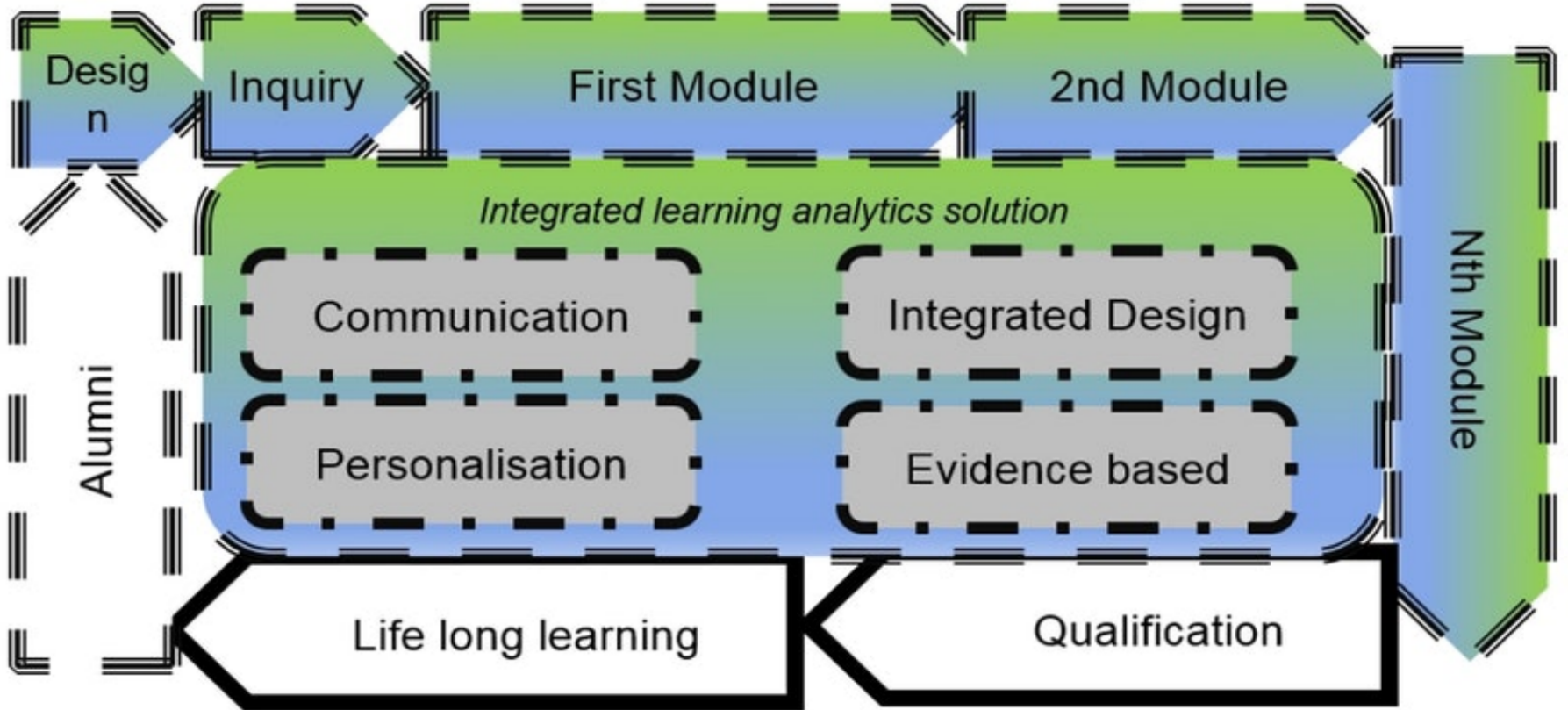
- Nagelkerke's $R^2 = .185$ (model explains 18% of the variance in passing rates)
- Correctly classified over 70% of the cases (prediction success overall was 70.2%: 33.5 % for not passing a module and 88.7% for passing a module).
- Significant predictors of both pass and completion rates:
 - OUA usage ($p = .006$)
 - Best previous module score achieved ($p = .005$)
 - All other predictors were not significant.







Where do you think your institution should focus on in developing a LA strategy?



I think that the OU UK is world-leading in learning analytics

1 Totally disagree

2 Disagree

3 Neutral

4 Agree

5 Totally agree

N/A I would not be
able to tell you this

Remaining issues

- Investment decisions made by OU: what choices were there, and what did we do?
- Investment and support of academic and professional staff
- What is the governance approach
- Training of teachers and staff to use analytics
- Our relations with commercial partners