Learning Analytics & Learner Profiles

Using digital data to support teacher decision-making

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Outline

- Introduction
- What is Learning Analytics
- How it aligns with Learner Profiles
- Current work with SA Schools
- Prospects for the future

Centre for Change and Complexity in Learning (C3L)

Understanding complexities of learning with digital technologies, AI, and its impact on broader society

www.unisa.edu.au/research/c3l

About myself

Vitomir Kovanovic

- Senior Lecturer in Learning Analytics at UniSA Education Futures

  How to use digital technology to support teacher decision making?

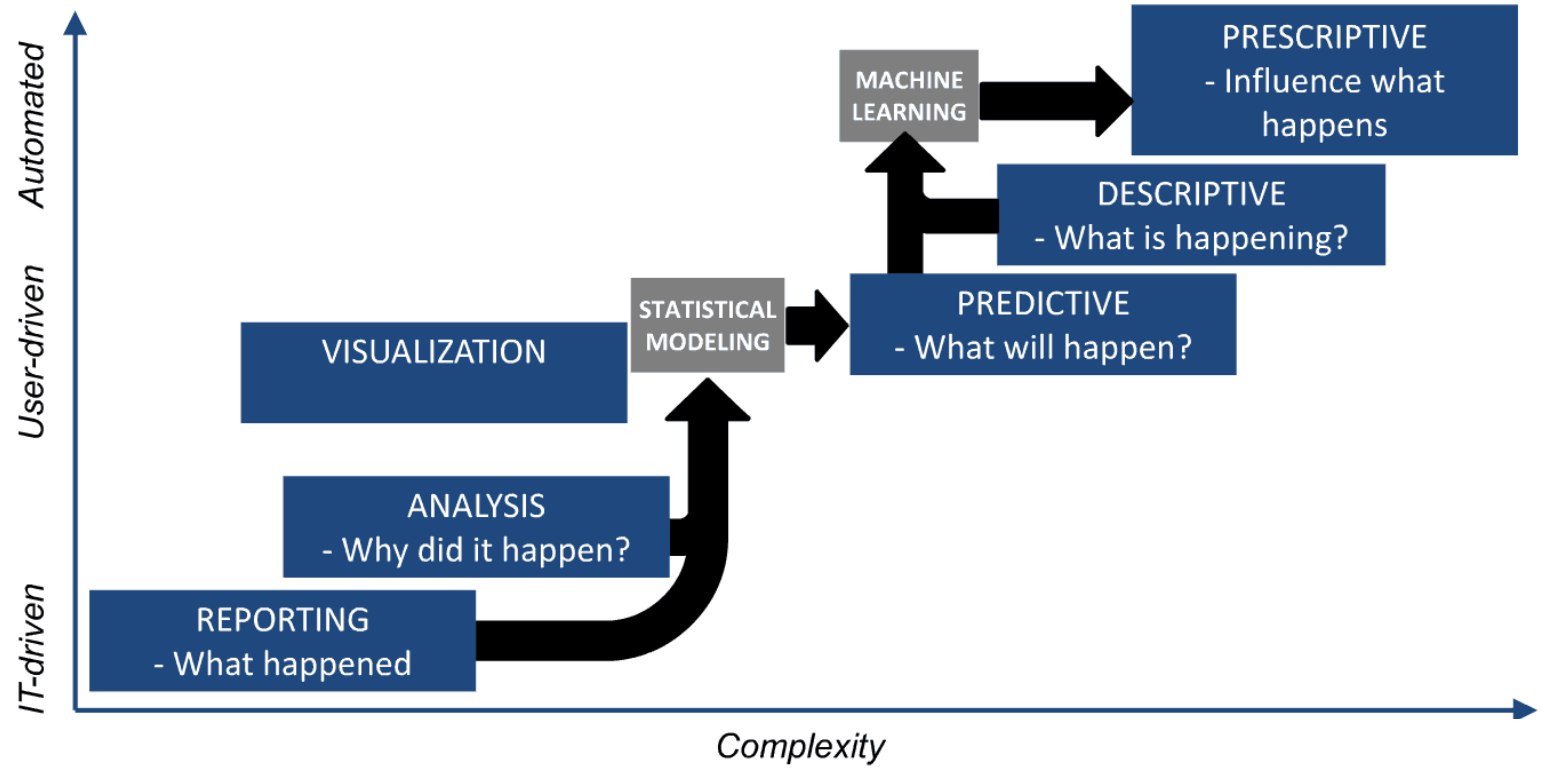
- Editor-in-chief of the Journal of Learning Analytics (JLA)
- 2021 Young Tall Poppy for SA
- 2019 Top Early Career Researcher in Australia (The Australian)

Background

- Started working with schools on the adoption of learning analytics and data-driven decision making
- At the same time, SACE started Learner Profile project
  - Both projects very complementary in nature
- Similar vision on what matters in learning
  - Improve access to higher education
  - Support disadvantaged learners
  - Improve learning outcomes of all students
  - Develop more holistic view of students and their learning

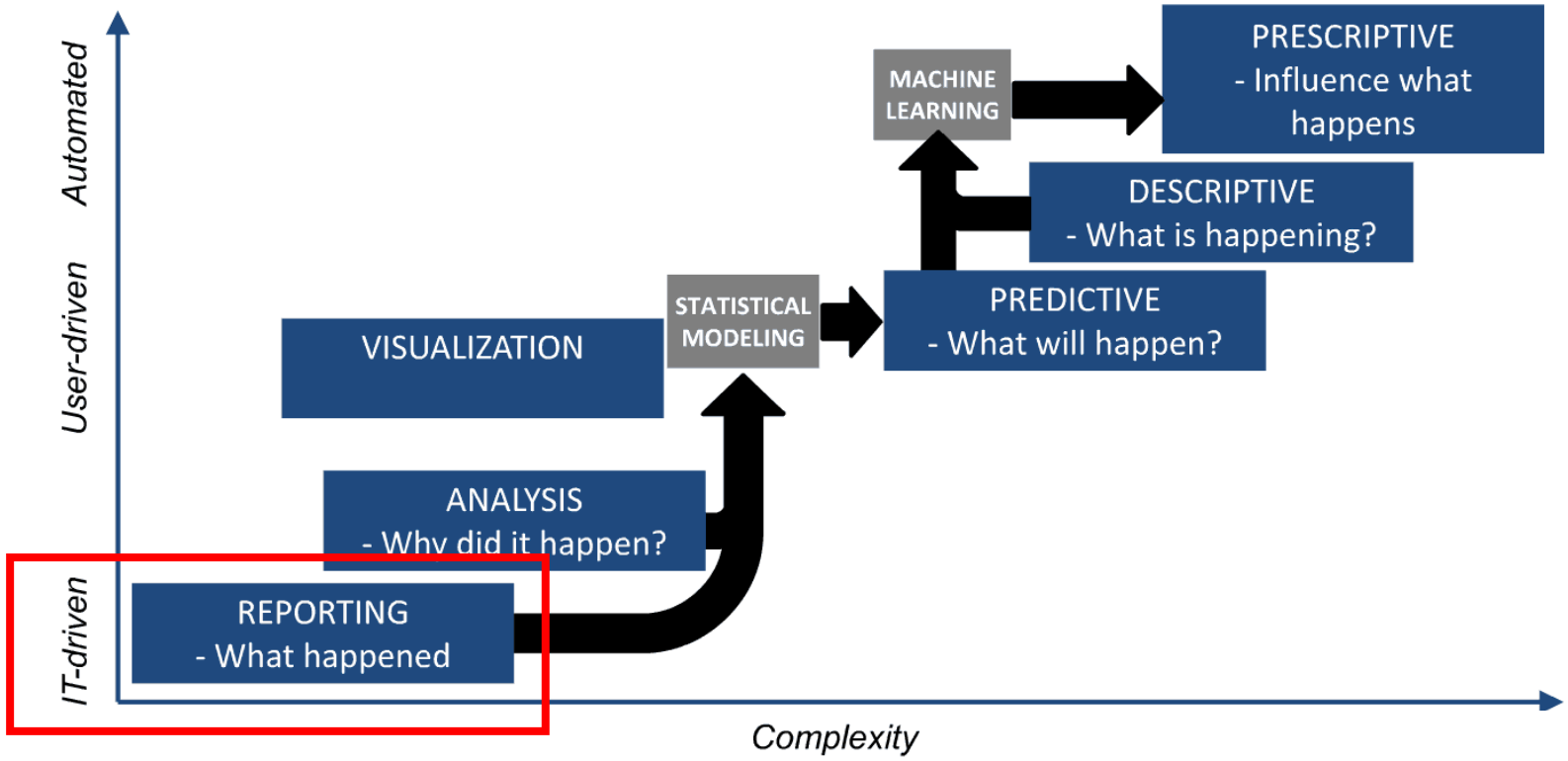
Learning Analytics

- Different levels of complexity



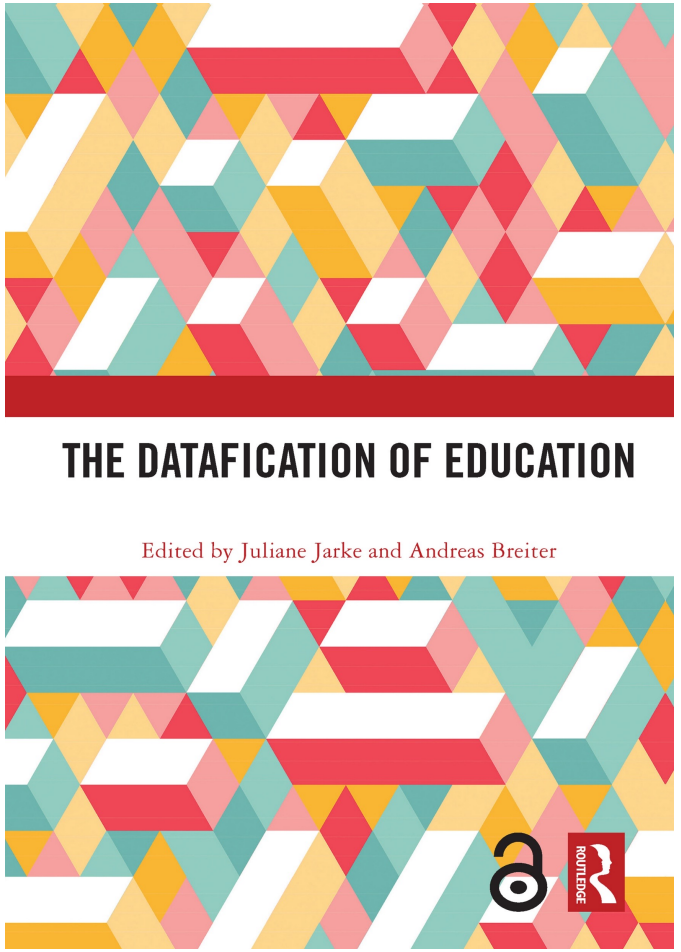
Learning Analytics

- Most schools focus on reporting



Current situation in schools

- More and more data being collected at schools
- Data often poorly organised and managed
- Data in independent silos
- Limited use of data to support teaching
- No longitudinal insights into learning development



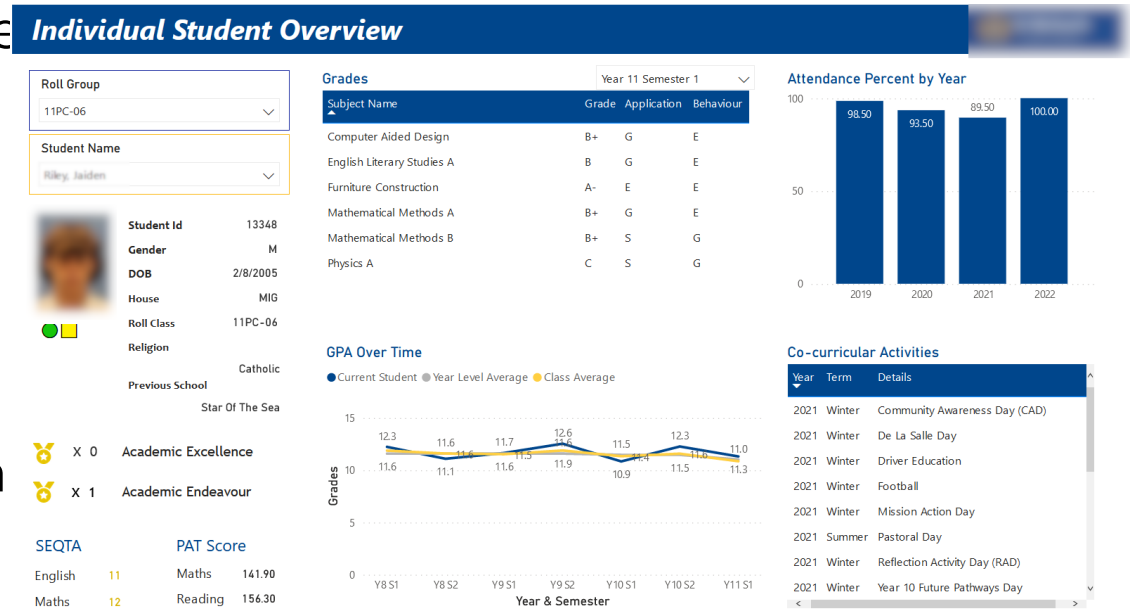
Goals of the project

Develop visualisations to support teache decision making

- R-12, not just Y11-Y12
- Focus on learning, not accreditation
- Support disadvantaged students
- Monitor learning progressions
- Identify intervention opportunities

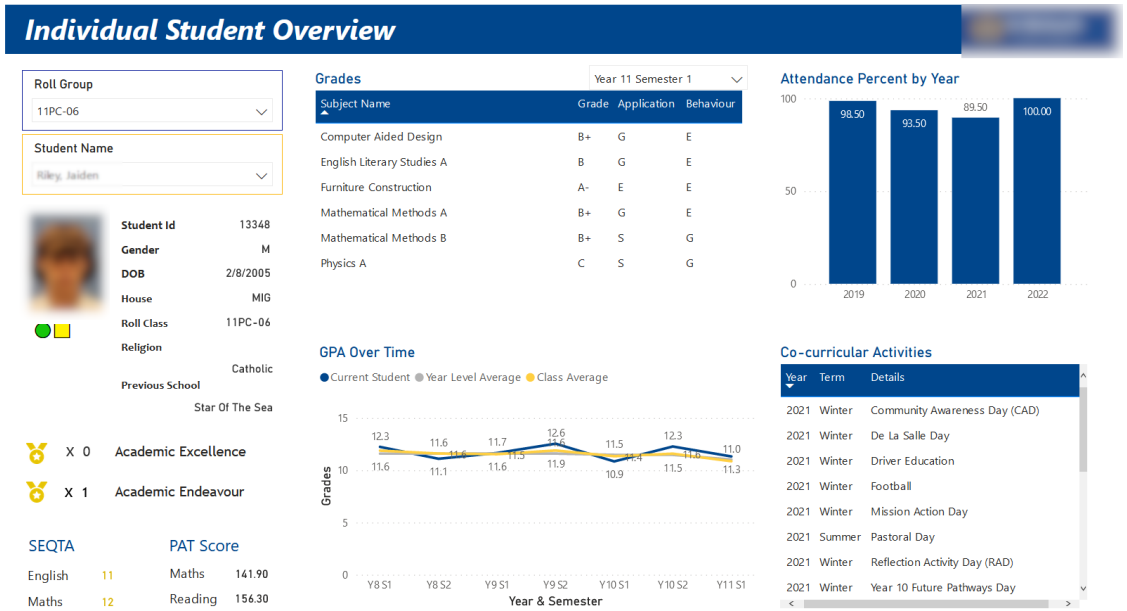
Quick & easy way to see all student data

- Grades
- Standardised tests
- Attendance
- Skills & Competencies
- Wellbeing
- Use of digital tools and services (LMS, Library)
- Extracurricular activities
- Learning progressions over time



Goals of the project

- Integration of data is essential for understanding student learning
- Explicit focus on teachers rather than administrators
- Later: Support school management through aggregation of data



Key lessons

- Include teachers early in the design process
- Provision of the data is not enough
- One size fits all does not work
- Build on existing projects and initiatives
- Create broader awareness across staff
- Adoption is far more about people than technology
- Focus on easy wins before brining in big changes

Prospects for the future

- Early pilots very positive
- Broader adoption by senior school leaders, year coordinators, councillors
- Expand with more advanced AI and predictive analytics
- Together with SACE Board, develop learning analytics metrics for some of the LP capabilities
- Provide assessment of graduate qualities
- Looking at doing a similar project at UniSA, to develop a Learner Profile for tertiary settings

Prospects for the future

- Looking for new partners interested in using data to support teaching
  - Learner Profile dashboards
  - Predictive modelling of student success
  - Short term collaborative projects
  - School-based PhD research projects

Thank you

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