Learning analytics are already in use at the UofA...

...my goal is to provide a framework for ethical use of student data
Some examples from elsewhere
● students can compare their usage of the learning management system to their classmates

● students using CMA were nearly twice as likely to get a C or higher than those who didn’t

● combined with adaptive release of course content, led to 20% higher grades

● adaptive release also led to higher grades in a subsequent course
● uses data from the student information system and the learning management system (LMS)
● produces a “traffic light” indicator of each student’s progress in a course
● results available as early as second week
● instructors can follow up with students - post signal, send email, arrange meeting, etc.
● documented 14% fewer Ds and Fs in courses using Signals, and 12% more Bs and Cs
● students sought help earlier and more frequently, and this effect persisted outside courses using Signals
● created a model to identify students who would most benefit from support
● based on admission data, placement tests, student survey, financial data
● output directed to student advisors
● table showing, for each student, current retention prediction, reason(s) for the prediction, and confidence level
● detailed research investigation of LMS data
● also included gender, declared minority status, income, high school grades, first-generation university attendee, and four other student characteristics
● found that LMS data alone gave better predictions of student success than demographic and enrolment data
● LMS variables were four times more strongly related to achievement than demographics
- 30,509 students in Fall term 2017
- Model to identify students at risk of failing or withdrawing from all courses in first term
- “Math pathways” model to identify best math courses for student success
- Interactive tool that incorporates model results and data from the student information system
• home of the Open Academic Analytics Initiative
• open source early alert system
• most significant variables in predicting success were course marks to date, GPA, and current academic standing
• model tested successfully at other institutions
• model now deployed at several universities in the UK as part of Jisc learning analytics
● goal was to offer timely support to students
● e-Motion: every student can opt-in to set an emoticon on their homepage
● The Vibe: text box on every student’s home page is aggregated into a cohort word cloud, displayed to all students
● Automated Wellness Engine (AWE) - model based on course behaviours is run every night; advisor dashboard updated each morning
● reduced attrition from 18% to 12%
● qualitative feedback from students indicated an increase in a sense of belonging
- Open U, UK: 200,000 students - retention is strategic - analytics are used to improve student experience
- Nottingham Trent (NTU) - institution-wide dashboard on student engagement to facilitate dialog between students and staff
- University of Wollongong - analysis of social networks in (large) online discussion forums
- Open Universities Australia - personalized pathway planning through course modules