Traditional model of learning analytics
Apparently treating it as human-subject research...

Learning Analytics
» Consent
GDPR-valid consent

Must be...

Free/easily withdrawn

» So can’t link it to participation in something else (e.g. learning)

Informed

» So can’t use it for things not foreseen at collection time (3+ years ago)

Active

» So can’t infer it from silence
So consent fails for...

Data Collection
» Most input to Learning Analytics is observed/leftover data
» Getting consent for data we already have is hard; opt-in means biased

Model Building/Pattern Finding (how to detect students needing help?)
» We may not know in advance what we’re looking for
» Not opting in might well be a signal, but we can’t use it!

Pattern matching (does this student need help?)
» We want to check patterns across whole cohort
» Those who opt in probably don’t need help!
Much better legal basis for these…
With requirements that are things we want anyway…

Legitimate interest (in delivering the best learning experience)
» So only use learning analytics results for that

Necessary (no less intrusive way to do that)
» Minimise/protect the data we process and the results
» Only use inputs likely to be meaningful (use pilots to determine that?)

Not overridden by individual rights/freedoms (balancing test)
» So assess, minimise and monitor risks/impacts we create
» Good way to detect/avoid discriminatory algorithms
More informative model of learning analytics
Based on Cormack AN (2016), 3(1) Journal of Learning Analytics 91-106

Collection
- Data debris
- Necessary for 1st purpose

Analysis
- Pattern-finding
- Stated 2nd purpose
- Legitimate interests
- Necessary processing
- Minimise impact
- Balance rights & interests
  - Individual opt-out

Intervention
- Pattern-matching
- Maximise impact
- Free, informed consent
  - Choice: personal/vanilla

Donation
- Voluntary self-reporting
- Free, informed consent
- No detriment

Improvement
- Pattern-using
- No personal data
Advantages for...

Students
» Data only used to your benefit
» Privacy and other rights protected
» Meaningful, informed choices, at point of intervention

Teachers
» Supports good relations with students (“helping”, not “spying”)
» Privacy and other rights protected

Institutions
» Lots of guidance available
» Demonstrate good practice (GDPR accountability good for reputation)
» Clear distinction from “creepy” uses of Big Data
Existing guidance
From Article 29 Working Party of DP Regulators

Purpose Limitation (Opinion 03/2013 WP203)
» How to avoid purpose-creep?

Legitimate Interests (Opinion 06/2014 WP217)
» Which Interests are Legitimate?
» How to do the balancing test?

Consent (Guidelines 10\textsuperscript{th} April 2018 WP259rev.01)
» How to get valid consent?
Sensitive Personal Data/Special Category Data

Can’t use legitimate interests for
» Race, ethnicity
» Religious/philosophical beliefs
» Trade union membership
» Genetic, biometric, health data
» Sex life, sexual orientation

So need consent (or legal obligation) for
» Collection (or obtaining from elsewhere)
» Identifying and applying patterns
  › Can’t postpone consent, as for non-SPD
  › i.e. must know consequences at start

So more constraints on “data-driven” for these data

Usually donated info anyway: encourage users to trusting/truthful
Seeking consent probably a good way to identify objectionable proposals
If *generating* SCD (e.g. suicide risk) discuss first with DP & Medical authorities
References

Article 29 Working Party


» Consent http://ec.europa.eu/newsroom/article29/item-detail.cfm?item_id=623051

Me:

» https://community.jisc.ac.uk/blogs/regulatory-developments/tags/Learning-Analytics


Thanks

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https://community.jisc.ac.uk/blogs/regulatory-developments/tags/Data-Protection-Regulation