Ethics & Privacy Issues in the context of Learning Analytics

Alan Berg (Universiteit van Amsterdam), Maren Scheffel (Open Universiteit)
Agenda

• Introductions
• Community building
• The Process
• Findings
• Discussion
Introduction

Alan Berg  BSc. MSc. PGCE.

• Innovation WG ICTServices UvA & HvA
• Member of the Focus Group LA at the UvA
• Community Officer Apereo Learning Analytics Initiative
• SURF SIG Learning Analytics Co Chair (with Hendrik Drachsler, OUNL, LACE Project, well known in the field, read his research)
Introduction

Maren Scheffel  M.A. Computational Linguistics

• Researcher & PhD Candidate at the Open Universiteit,  
  Faculty: Psychology and Educational Sciences  
  Department: Welten Institute  
  Programme: Technology Enhanced Learning Innovations  
  Focus: Learning Analytics and Open Data

• works for the LACE Project (laceproject.eu)

• member of the SURF SIG Learning Analytics
Community Building

Learning Analytics is a global movement
Community Building
Diverse – complex – beautiful

- SoLAR
- LACE
- Apereo
- SURF, JISC
- Educause
- Universities
- Commercial
- Funding authorities
- EU projects
- MORE ……

CC: https://www.flickr.com/photos/photonquantique/1411702665/

OWD 2014 – Ethics & Privacy in the Application of Learning Analytics
EU Context

Modernisation of Higher Education

REPORT TO THE EUROPEAN COMMISSION ON

New modes of learning and teaching in higher education

Recommendation 14
Member States should ensure that legal frameworks allow higher education institutions to collect and analyse learning data. The full and informed consent of students must be a requirement and the data should only be used for educational purposes.
Recommendation 15
Online platforms should inform users about their privacy and data protection policy in a clear and understandable way. Individuals should always have the choice to anonymise their data.
The Process

• Goal
  – Open Book on Ethics and Privacy Issues in LA

• **Team**
  – preparation and supervision
    **Hendrik Drachsler & Maren Scheffel**
  – Support
    • SURF
    • Alan Berg & Gábor Kismihók

• First step
  – Survey about Privacy and Ethics issues
The Process

• Series of **interconnected workshops**
  – Utrecht, Oct 28, 2014
  – Rotterdam, Nov 11, 2014
  – Poughkeepsie, LAK15, March 2015

• **End product**
  – an internationally validated set of opinions that can feed policy
Example Survey Questions

- Who is in charge (who is the owners) of the data created by persons?
- What is the impact of privacy concerns for the management? How to deal with these concerns?
- Should students be allowed to opt-out of having their personal digital footprints harvested and analysed?
- How to prevent reuse of collected data for non-educational needs. (e.g. finance, insurance, research), or is it no problem?

Findings - 10KM view

• Questions well mapped to **Principles of privacy**

• **Privacy by Design** needs to be baked in from start for production systems ( [http://www.privacybydesign.ca](http://www.privacybydesign.ca) )

• There are **three well defined groups** who care to different levels about privacy.
Themes around Privacy

• **Legitimate grounds**
  (Why are you allowed to have the data)

• **Purpose of the data + Limitation to the purpose**
  (→ *Repurposing* is an issue)

• **Data quality**
  (1. How good is the data, 2. When do you I delete data and what data; We need different types of data (mouse clicks, e-portfolio information))
Themes around Privacy

• **Transparency**
  (Informing students, Checklist what to communicate)

• **Inventory of data**
  (What data do you have? What can you do with that data already?)

• **The right of the data subject to access their data from the data client**
  (For teachers teachers who are employees there are even)
Themes around Privacy

• **Outsource processing to external parties**
  (You have to make sure that the external parties does not do additional and own analysis with the captured data → NDA agreement)

• **Transport data, legal location**
  (→ Safe Harbour agreement)

• **Data Security**
Privacy by Design
?? For large scale deployments ??

Foundational Principles
1. Proactive not Reactive;
2. Privacy as the Default Setting
3. Privacy Embedded into Design
4. Full Functionality
5. **End-to-End Security**
6. Visibility and Transparency
7. **Respect for User**

Grouping around Privacy (Approximate)

- **25%** Privacy fundamentalist (don’t share any data)
- 60% Medium data shares
- 15% Don’t care group
- No evidence but we expect the ration to change depending on age demographics.

Resource for general survey information:

https://epic.org/privacy/survey/

One example of divisions into groups:

Discussion: YOUR TURN

- Who is in charge (who is the owners) of the data created by persons?
- What is the impact of privacy concerns for the management? How to deal with these concerns?
- Should students be allowed to opt-out of having their personal digital footprints harvested and analysed?
- How to prevent reuse of collected data for non-educational needs. (e.g. finance, insurance, research), or is it no problem?
- Teachers indicated that they do not always want to be confronted with detailed analysis of a learner. They want to be able to keep an open mind. Is this ethical?
Acknowledgements

• Those who attended the Privacy workshop in Utrecht.
• Clipart: https://openclipart.org
• The authors mentioned in the links
• SURF, LACE for supporting the community
• You, for your future work
**Wat doet de SIG Learning Analytics?**

- **Kennis delen:** het uitwisselen van informatie, nieuws en best practices.
- **Kennis bundelen:** bij elkaar brengen van experts, docenten, studenten en andere belangstellenden.
- **Kennis genereren:** samen nieuwe inzichten ontwikkelen op bijeenkomsten en in focusgroepen.

**Waar vindt u de SIG Learning Analytics?**

- **SURFspace:** een online platform met nieuws, blogs en literatuur over learning analytics: [www.surfspae.nl/learninganalytics](http://www.surfspae.nl/learninganalytics)
- **Bijeenkomsten:** de SIG Learning Analytics organiseert regelmatig bijeenkomsten, bijvoorbeeld bij SURFacademy, het professionaliseringsprogramma van SURF.
Contact

Alan Berg
A.M.Berg@uva.nl

Maren Scheffel
maren.scheffel@ou.nl
• [https://www.youtube.com/watch?v=LfXDzpTnvqY](https://www.youtube.com/watch?v=LfXDzpTnvqY)  
  (17 minutes, last 5 minutes possible)
• Open Learning Analytics  
  [http://www.solaresearch.org/OpenLearningAnalytics.pdf](http://www.solaresearch.org/OpenLearningAnalytics.pdf)