

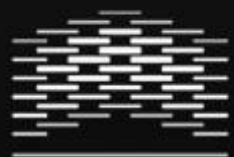
Learning Analytics Summer Institute ASIA 2016

Scaling up learning analytics solutions: Is privacy a show-stopper?

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OSLO AND AKERSHUS
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LACE

Scaling up: From the research labs to the classroom



Research Ethics

General Ethics

Ethics & Privacy a Show-stopper?



Unlawful Learning Analytics?

Lawfulness, Purpose limitation, Data minimisation, Consent, etc.

«learning analytics will be **unlawful** and the **school owner will not be able to maintain** the most vital data protection principle: the data principal (the student) will not have control of and a say concerning the use of his or her own information»

(IKT-senteret, Norway = KERIS in Korea)



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Ethics are increasingly important

‘Visions of the Future’ run by www.laceproject.eu

Too much Big Brother vision to be appealing.

Examples from USA and InBloom clearly demonstrates that lack of trust regarding how private data is managed is crucial

There should be strong discussion about the Ethical concerns that apply to each approach to Learning Analytics

Learning Analytics is being used in schools with no consideration of ethics, still less consultation or informed consent. This is likely to lead to a backlash.

Users should be entitled to know how their data are interrogated and used and for what reasons. This should be made explicit and easy to understand

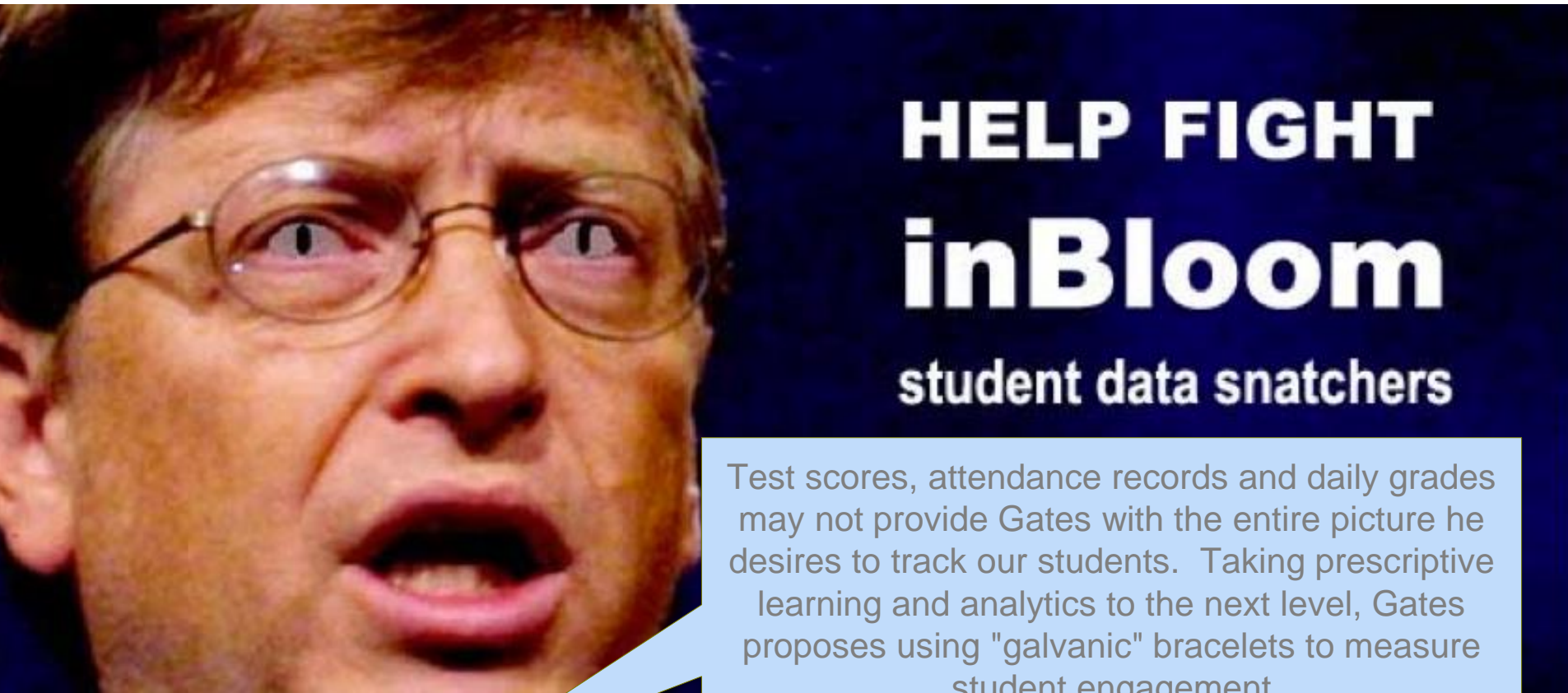
Concerned about device security, data protection, transparency of policy, use of data and ethics.

important that all aspects of privacy and data integrity and data control is secure

Continue to raise profile of ownership and ethics around data.

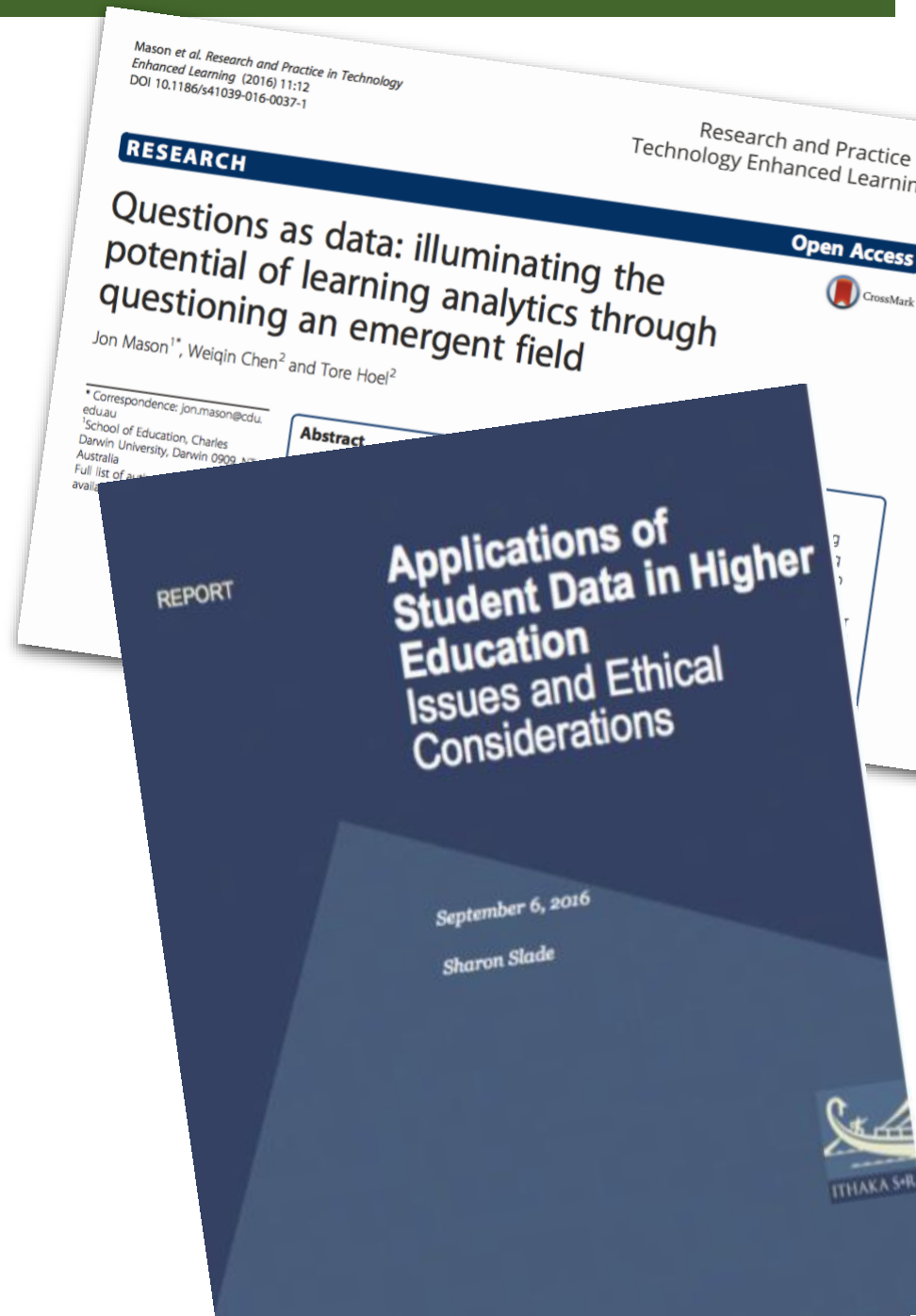
What could go wrong?

Nine states, 11 million students, \$10 million



Test scores, attendance records and daily grades may not provide Gates with the entire picture he desires to track our students. Taking prescriptive learning and analytics to the next level, Gates proposes using "galvanic" bracelets to measure student engagement

Relevant Questions to be asked



Questions (Mason et al. 2016)

The ability for the user to **withdraw consent** at any time

Do students have the right to **withdraw from data collection and analysis** after previously giving their consent?

Can all data regarding an individual (except that necessary for statutory purposes) **be deleted**?

To what extent **should students be able to access the analytics** performed on their data?

What are the concerns when outsourcing the collection and analysis of data? **Who owns the data**?

To what extent do we provide students the **option to update their data** and provide extra (possibly qualitative) data?

What data should students be able to view, i.e. what and **how much information should be provided to the student**?

Are **interconnected datasets a threat** to personal and democratic principles?

What **should students be told about the potential consequences of opting out** of data collection and analysis of their learning?

Can students be **identified from metadata even if personal data has been deleted**?

Questions (Slade 2016)

- Activities which should always be **off-limits**? (E.g., physical tracking to locate students at any time? Non-study related online activity?)
- **Who “owns” student data**? Personal and study data as a commodity to be traded?
- Should all activities/applications come with **full disclosure**?
- Should **applications only be used if they can be understood** by students?
- Should there be limits around the **confidence levels of predictions** used to drive interventions? Should anything predictive be sense checked for context by a human first?
- Should **all students have equal “rights” to interventions**?
- **Availability of data** (access to; completeness of; or the use of one available dataset as a poor proxy for another, etc.)?

Ethics and Learning Analytics

- Knowing
- Not knowing
- Refusing to know
- Acting upon what you know
- Not acting upon what you know
- What responsibility is it to know?
- Can we un-know knowing...?
- And even if we knew and understood our students, do we have the will and the resources to do something about what we (think we) know?



What is the Law?



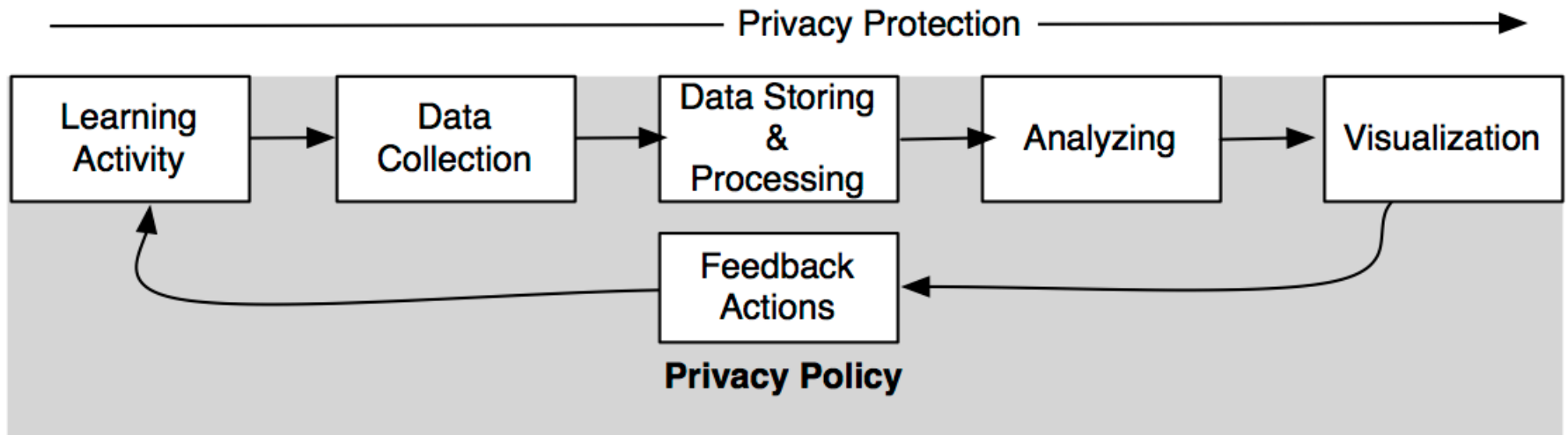
New European Data Protection Regulation (GDPR) for the digital age

*Published May 2016 –
National law in all
European countries
from 2018*

- Consent for processing data:
A clear affirmative action
- Easy access to your own data (Data Portability)
- Data breaches (e.g.,
hacking): Notice without
undue delay
- Right to be forgotten
- Data protection by design
and Data protection by
default



Each LA process is affected by GDPR



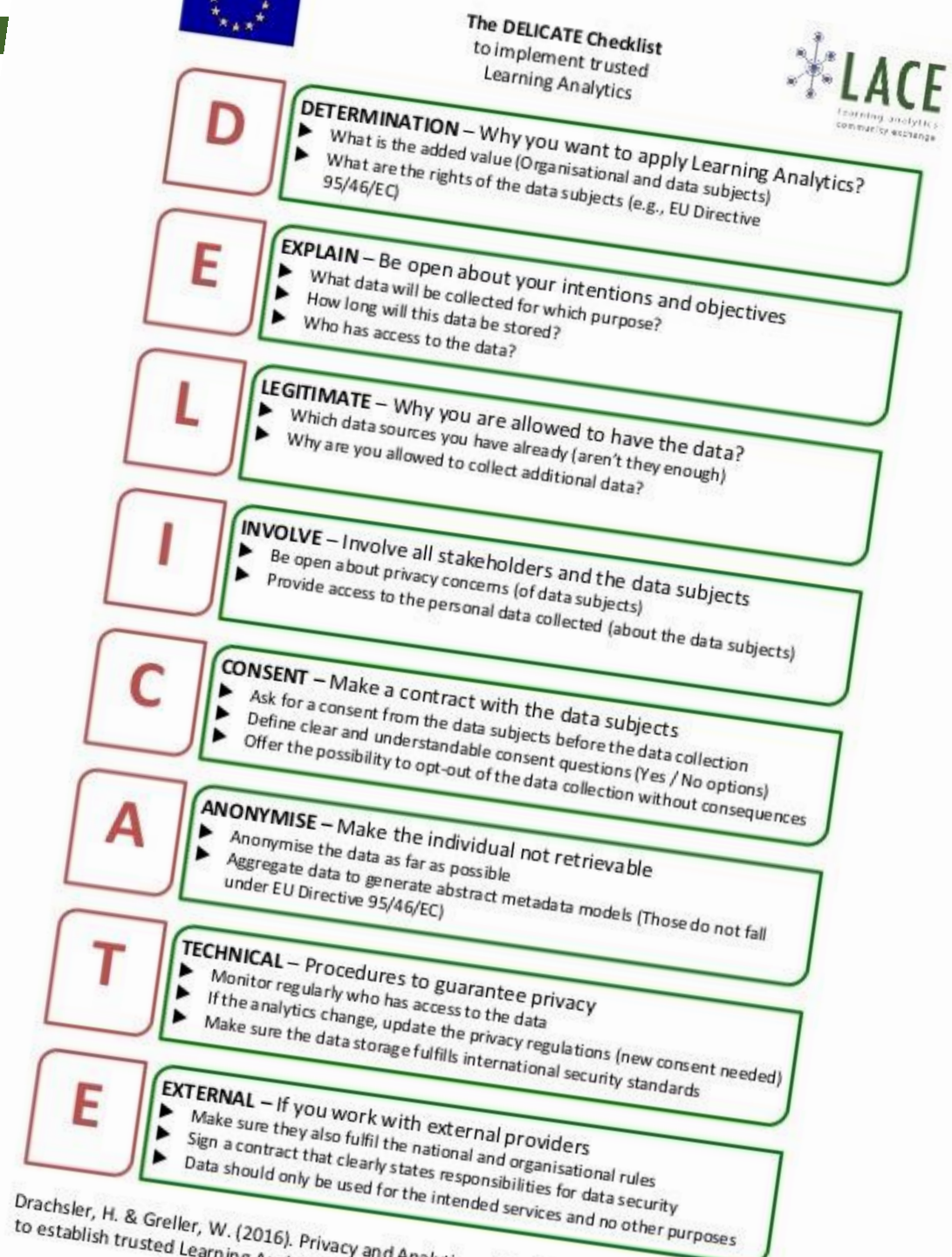
LA processes defined by ISO/IEC JTC 1/SC36

Global Privacy Frameworks

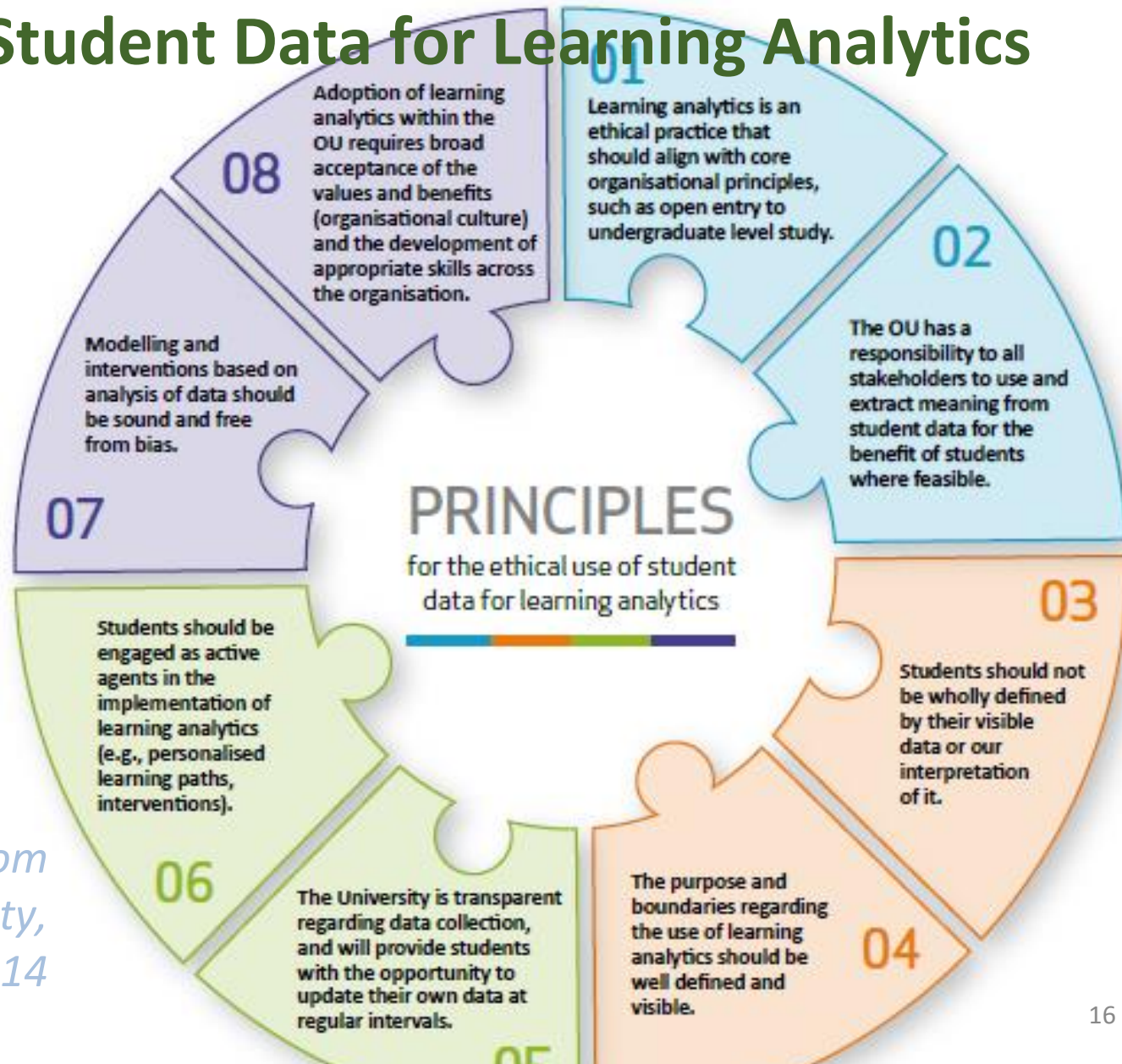
- Global market for LA tools
- EU regulations may be more strict...
- Should privacy frameworks influencing Asian DP laws be updated?
- Share the same foundational DP principles

<i>OECD</i>	<i>APEC</i>	<i>EU: GDPR (Article 5 & 25)</i>
Collection limitation	Preventing harm	Lawfulness, fairness and transparency
Data Quality	Notice	Purpose limitation
Purpose specification	Collection limitation	Data minimisation
Use limitation	Uses of Personal Information	Accuracy
Security Safeguards	Choice	Storage limitation
Openness	Integrity of Personal Information	Integrity and confidentiality
Individual Participation	Security Safeguards	Accountability
Accountability	Access & Correction	
	Accountability	(Article 25) Data Protection by Design and by Default

The LACE DELICATE Checklist to implement trusted Learning Analytics



In the meantime – develop institutional policies on Ethical use of Student Data for Learning Analytics



*Example from
Open University,
UK, 2014*

Thank you!

Hoel, T. (2016) Scaling up learning analytics solutions:
Is privacy a show-stopper?

Presentation at www.lasi-asia.org in Seoul, Korea, 19 September 2016

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