RESPONSIBLE USE OF STUDENT DATA IN THE DIGITAL ERA

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AGENDA

1. Why this session? Risks and opportunities of the current moment (45 minutes)
2. Pasts and possible futures of student records (45 minutes)
3. Applying and evolving principles of responsible use (100 minutes)
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ANTICIPATED TAKEAWAYS

Overview of the current landscape of data-ethics discussions in postsecondary education

Recognition of how these discussions are “living” questions on our campuses

Tractable principles and policies of potential use in your own institution/organization
On 1-4 June, 2014, a group of educators, scientists, and legal/ethical scholars assembled at the Asilomar Conference Grounds in Pacific Grove, California. Their task was to develop a framework to inform decisions about appropriate use of data and technology in learning research for higher education. A modified Chatham House Rule guided their deliberations, which produced the convention presented here.

This convention reflects general principles rather than the views of individual participants.

The Asilomar Convention for Learning Research in Higher Education

Individuals, nations, and international agencies of all kinds increasingly rely on the promise of education to improve the human condition. Contemporary technology has created unprecedented opportunities to create radical improvements in learning and educational achievement, but also conditions under which information about learners is collected continuously and often invisibly. For these reasons, collection and aggregation of evidence to pursue learning research must proceed in ways that respect the privacy, dignity, and discretion of learners.

Virtually all modern societies have strong traditions for protecting individuals in their interactions with large organizations, especially for purposes of scientific research, yet digital media present problems for the inheritors of those traditions. Norms of individual consent, privacy, and autonomy, for example, must be more vigorously protected as the environments in which their holders reside are transformed by technology. Because the risks associated with data exposure are growing simultaneously with the promise of building new knowledge, researchers and educational organizations must be accountable for how they pursue learning inquiry. This convention reaffirms enduring commitments to ethical conduct, and to the protection of public trust in the institutions of higher education.

The convention affirms two tenets for learning research:
Digital technologies have created unprecedented opportunity to understand student learning and enhance educational attainment. They also raise new questions about the ethical collection, use, and sharing of information. Our project catalyzes national and global discussion about responsible use of data describing students, instructors, and the organizations which bring them together.

About

Responsible use of data in educational environments entails commitments to honor the integrity, discretion, and humanity of students. It also obliges instructors and organizations to improve practice in light of accumulating information and knowledge.

RESEARCH to build basic knowledge  
APPLICATION for educational improvement  
REPRESENTATION of learning and accomplishment
FACT 1: THERE NOW IS NO DEFAULT PLATFORM

The classroom:

is a physically and temporally bounded location
exists in nested jurisdictions -- college, district/system, US state, nation -- with relations negotiated over generations
implies special sovereignty over content and evaluation for instructors.

The web:

does not entail physical or temporal boundaries;
commingles multiple jurisdictions whose relations are now being negotiated;
implies no particular sovereignty over content and evaluation.
FACT 2: THE ACADEMIC RECORD IS BEING REMADE

Yesterday:

each person had one official college record;
schools held records exclusively, in trust, in perpetuity;
available data for comprising records were thin, controlled by instructor-sovereigns and their designates, and difficult to integrate with other data.

Today:

there is rapid proliferation of academic providers and mechanisms for recording accomplishment;
schools have lost their cartel on records generally but retain their fiduciary obligations over their own students’ records;
available data for comprising records are rich, varied, jointly held, and easy to integrate with other data.
Institutional practices to improve student learning and support

Data that are granular, collected in larger sets, are longitudinal, or are linked across systems
APPLICATION for educational improvement

RESEARCH to build basic knowledge

REPRESENTATION of learning and accomplishment
APPLICATIONS

Enrollment management

Institutional programs & policies

Early alert

Adaptive courseware
GREAT DIVERSITY IN DATA USE

2016 KPMG Survey
• 41% of respondents use student data for predictive analytics
• 29% have internal capacity to analyze own data

2016 Campus Computing Survey
• <20% of respondents rated their institutions’ data-analytics investments as "very effective"

Ithaka S+R Faculty Surveys
• Minority are using any form of technology in instruction, although 63% want to
CONCERNS

Privacy
Consent
Algorithmic bias
Opacity
Self-fulfilling prophecies
Institutional interest ≠ student interest
FIVE QUESTIONS

1. What data goes in the record, what does not, and who decides?

2. Do educators/researchers have a responsibility to use student data in some ways?

3. Do educators/researchers have a responsibility to not use data in some ways?

4. Whose data (and records) are they?

5. Do we have adequate language for talking about these things?
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FROM WHENCE THE STUDENT RECORD?
(HUTT 2016)

• Near-ancient tradition of faculty sovereignty over instruction/curriculum
• Long tradition of federated autonomy among US colleges and universities
• First major impetus to standardize academic reporting in US in early 20th century
• FERPA 1974 provided first legal definition of student record in US history
WHAT DO CURRENT “OFFICIAL” RECORDS CONTAIN?

• Courses taken
• Grades and/or units earned
• Years of attendance
• Locations of attendance
• Class rank
• *aka not much...*
...COMPAARED TO THE UBIQUITY OF INFORMATION DESCRIBING STUDENTS NOW AVAILABLE

- Learning management (LMS) data, including assignments, reading consumption, forum posts

- Data describing movement through campus spaces including residences, exercise facilities, libraries and dining halls

- Data describing use of campus counseling and advising services

- Data describing use of institutional web-based services
ADDITIONALLY, ACADEMIC SPACES ARE NOW JOINT VENTURES

• Jurisdiction over classrooms is shared by multiple parties both within your organization and beyond it
• Classrooms are only one component of multi-site distribution of academic offerings; sites may vary in their propriety and sovereignty
• *Our inherited ethical frameworks are not designed to accommodate these new realities*
PRINCIPLES OF RESPONSIBLE USE

Shared understanding

Transparency

Informed improvement

Open Futures
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ELABORATING PRINCIPLES OF RESPONSIBLE USE

1. How would you further explain/clarify/edit the four principles?
2. What additional principles would you add and why?
3. What principles would you remove entirely and why?
“DROWN THE BUNNIES”
SCENARIO 1

Several professors at your institution now require students in their courses download and use a third-party class discussion app. The app is free to users and very popular with students for its canny design and ease of use. Many faculty find it far preferable to the discussion app that is built into your school’s contracted LMS.

Recently, your school’s IT department learned that the third-party app links student users to an (also free) career advisory network that includes recruiters for potential employers. Your IT department approached the vendor and asked it to provide a clear notification-and-consent policy for users that is in line with institution’s own policy. The vendor declined, citing minimal capacity for platform customization.
SCENARIO 2

Advisors have begun using a third-party platform that recommends majors for second year students who were previously undecided. The platform recommends majors based on students’ likelihood of graduating within five years based on coursework completed and grades achieved in years 1 and 2.

The platform charges a site license for your campus. This cost is covered by a grant from a foundation, which also paid for training/professional development for your campus’s advising team to incorporate the platform into their routine practice. The platform has been in use by your advisors for eighteen months.

Several students have rejected their recommended major, and have insisted on selecting a major in which (according to the platform) they have a low probability of graduating. Their advisors are unsure about how to support these students. Meanwhile, a few faculty members have learned of the platform and are sending e-mails to their campus colleagues alleging that the entire program is a “tracking scheme.” The institution does not currently have a policy about faculty, advisor, or student opt-out.
SCENARIO 3

Your Institution has begun using an early alert advising system that is explicitly intended to inform both students and their advisors when students may be struggling with their courses and need additional help. Right now, the system incorporates mid-term and final grades, course enrollment, major change, and registration. Most faculty and administrators regard the current program as a success.

The vendor seeks to pilot new capacity that incorporates more information about students’ activities by linking the current system with campus card swipes (for cafeteria, gym, and library usage as well as dorm entry/exits) and LMS user activity. The vendor has approached your school’s IT office to about having your campus be one of the beta testers for this program. The vendor offers free installation and white-glove services for three years in exchange for iterating the service at your site, access to relevant data by third-party evaluators of the beta pilot, and permission to name your school as a success story if persistence and completion rates rise significantly (at .05 level) within three years.
1. Who should be involved in interpreting and adjudicating principles of responsible use? Who should NOT participate in the process?

2. What challenges do you anticipate to implementing principles of responsible use?

3. What kind of cross-institutional coordination, support, or resources would be valuable?