Connect the Campus Data Dots: Using Institutional Systems to Support Students When They Need It Most

#acrlipas

Megan Oakleaf, Scott Walter, Kate Peterson, James Hodgkin, Anne Barker, Malcolm Brown

Libraries &
Student Point of Need

Integrated Planning & Advising for Student Success (IPASS) Systems
Early Alert Systems
Engagement Systems

High-Risk
High-Priority
High-Flier

Problem/Impetus – Completion & Debt Crises

- More students dropping out before completion

  - 6-year graduation rate mired below 60%
  - Disproportionately impacts students of color
  - Disproportionately impacts students from low-income families

- More students accruing debt (and defaulting)

Consequences & Negative Impacts

Wolff-Eisenberg, C. (2018). *Amplifying student voices: The community college libraries and academic support for student success project* (report). New York, NY: Ithaka S+R. Retrieved from http://www.sr.ithaka.org/wp-content/uploads/2018/08/SR_Report_Amplifying_Student_Voices_CCLASS-_08132018.pdf

- Educational achievement
- Career aspirations
- Financial security
- Socioeconomic mobility
- Knowledge and skill attainment
- Self-actualization
- Feelings of accomplishment
- Community membership

Factors Related to Lack of Retention

- pre-entry student attributes

- institutional characteristics

- student involvement and engagement (particularly in the first year)

- participation of faculty in student life in and out of the classroom

- cultural, economic, and social forces within and outside of the institution

- issues of equality (and the lack thereof)

- external events in student lives

- etc.

Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory & Practice, 8*(1), 1-19; Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press; Astin, A. W., & Oseguera, L. (2012). Pre-college and institutional influences on degree attainment. In A. Seidman (Ed.), *College Student Retention : Formula for Student Success* (2nd ed., pp. 119-145). Lanham: Rowman & Littlefield Publishers.

"It is one thing to understand why students leave; it is another to know **what institutions can do to help students stay and succeed**...knowing why students leave does not tell us, at least not directly, why students persist. More importantly it does not tell institutions, at least not directly, what they can do to help students stay and succeed."

"We **need to know more about the nature of [student] experiences** in [their] institutions, **the ways those experiences influence persistence**, and more importantly **the sorts of...actions that enhance their success** in higher education."

Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory & Practice, 8*(1), 1-19.

Learning Analytics

Learning Analytics Definitions

"the measurement, collection, analysis, and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs."

Conole, G., Gasevic, D., Long, P., & Siemens, G. (2011). Message from the LAK 2011 general & program chairs. *Proceedings of the 1st International Conference on Learning Analytics and Knowledge*, LAK 2011. Banff, AB, Canada.
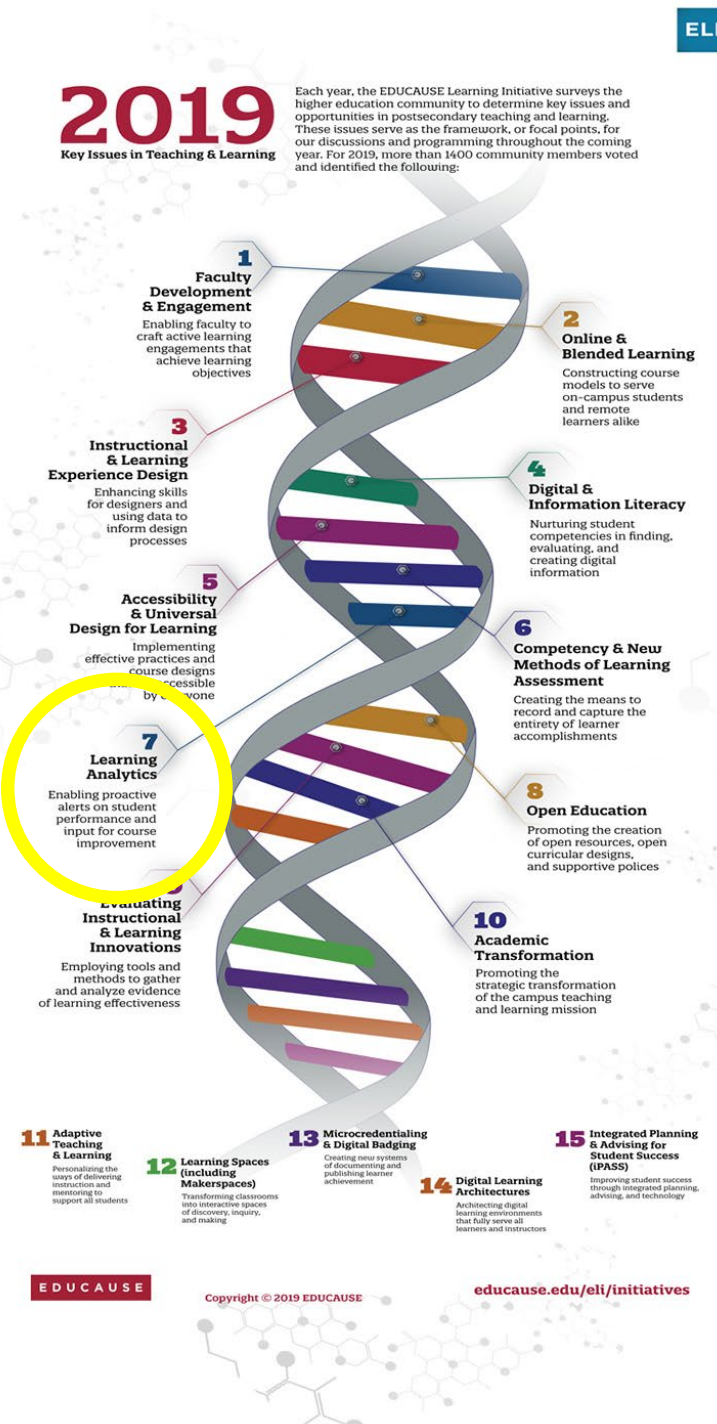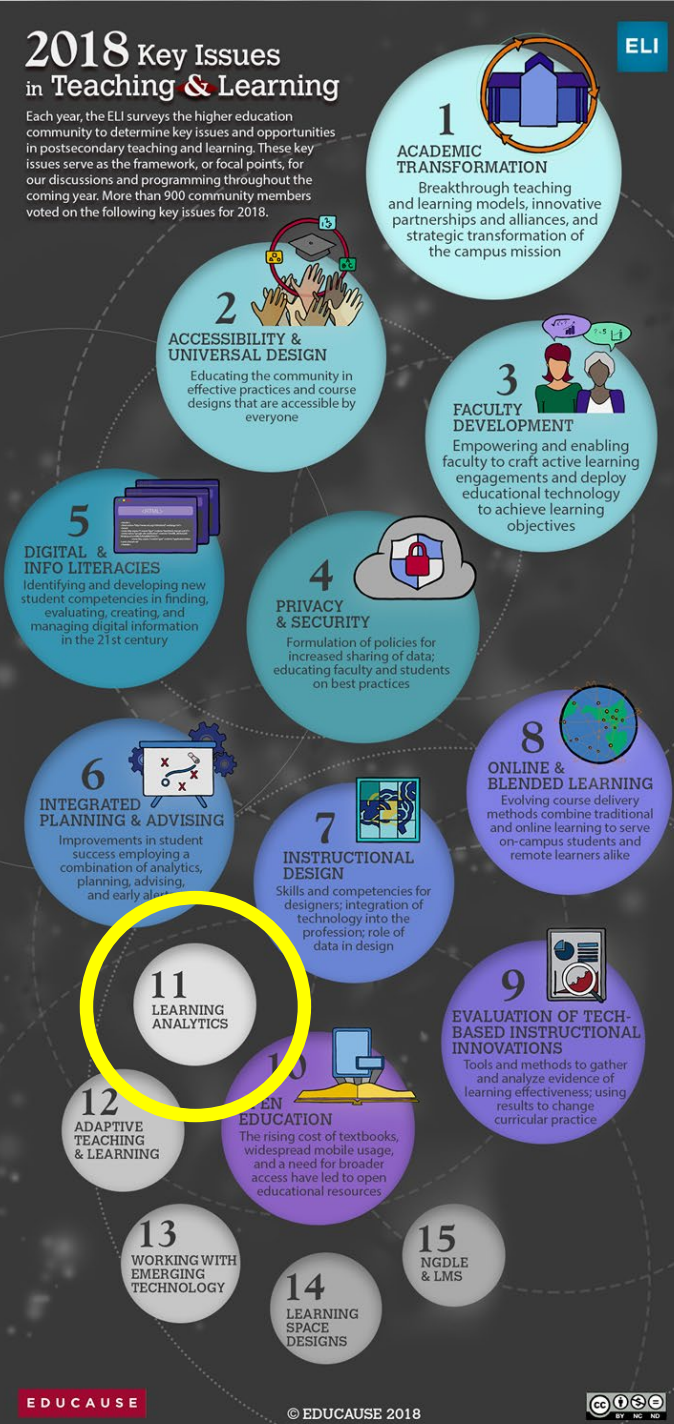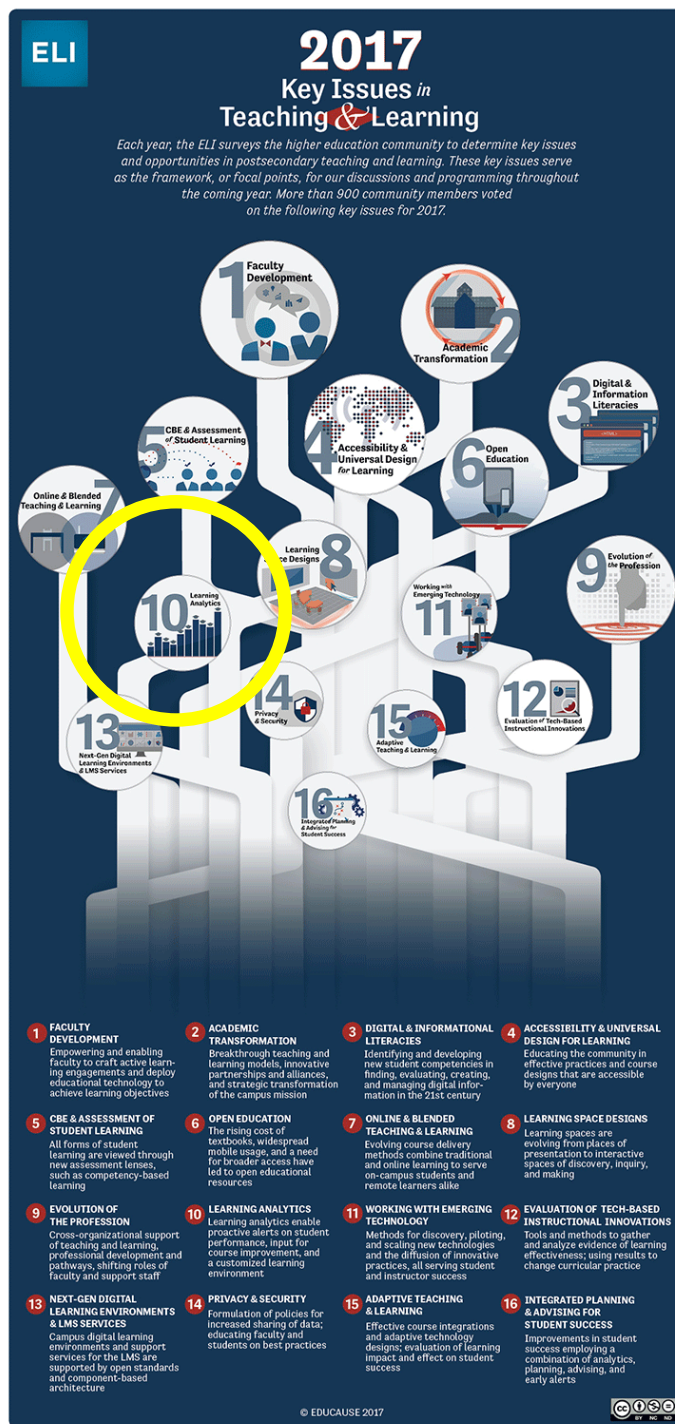
the "collection and analysis of usage data associated with student learning. The purpose of [learning analytics] is to observe and understand learning behaviors in order to enable appropriate interventions."
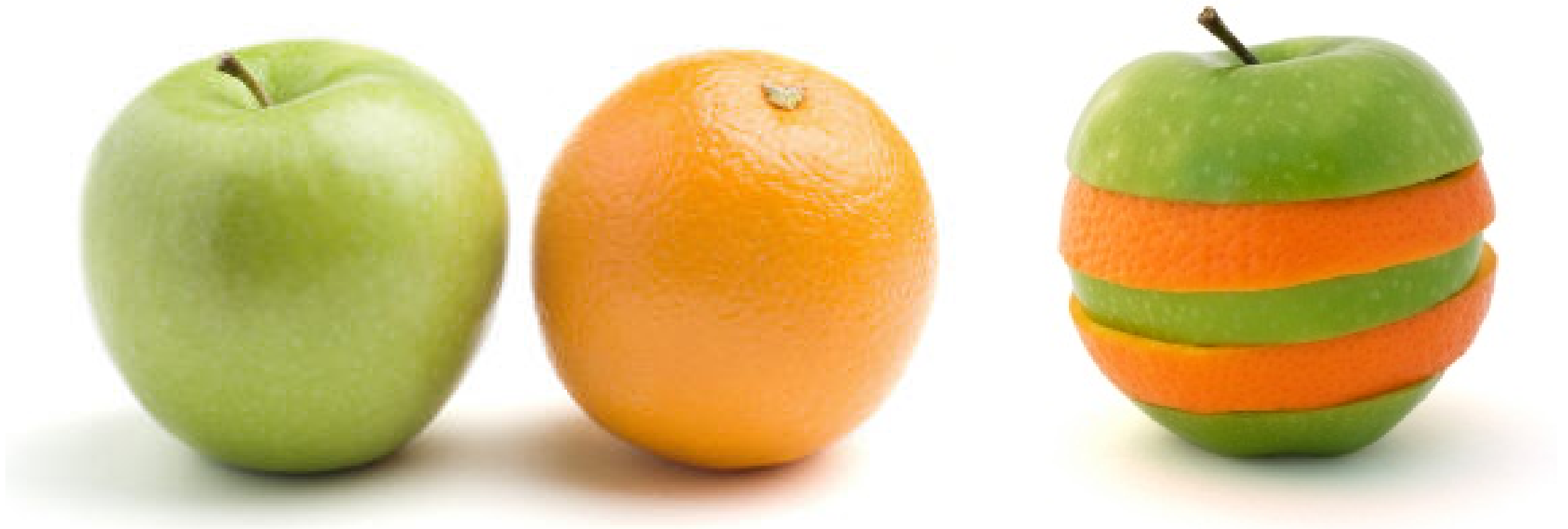
EDUCAUSE Learning Initiative. (2011, April). *Learning analytics: The coming third wave* (brief). Louisville, CO: EDUCAUSE. Retrieved from https://library.educause.edu/~/media/files/library/2011/4/elib1101-pdf.pdf

EDUCAUSE Key Issues in Teaching & Learning
Every year since 2011…

2017 Key Issues in Teaching & Learning

Each year, the ELI surveys the higher education community to determine key issues and opportunities in postsecondary teaching and learning. These key issues serve as the framework, or focal points, for our discussions and programming throughout the coming year. More than 900 community members voted on the following key issues for 2017.

1. **FACULTY DEVELOPMENT** — Empowering and enabling faculty to craft active learning engagements and deploy educational technology to achieve learning objectives
2. **ACADEMIC TRANSFORMATION** — Breakthrough teaching and learning models, innovative partnerships and alliances, and strategic transformation of the campus mission
3. **DIGITAL & INFORMATIONAL LITERACIES** — Identifying and developing new student competencies in finding, evaluating, creating, and managing digital information in the 21st century
4. **ACCESSIBILITY & UNIVERSAL DESIGN** — Educating the community in effective practices and course designs that are accessible by everyone
5. **CBE & ASSESSMENT OF STUDENT LEARNING** — All forms of student learning are viewed through new assessment lenses, such as competency-based learning
6. **OPEN EDUCATION** — The rising cost of textbooks, widespread mobile usage, and a need for broader access have led to open educational resources
7. **ONLINE & BLENDED TEACHING & LEARNING** — Evolving course delivery methods combine traditional and online learning to serve on-campus students and remote learners alike
8. **LEARNING SPACE DESIGNS** — Learning spaces are evolving from places of presentation to interactive spaces of discovery, inquiry, and making
9. **EVOLUTION OF THE PROFESSION** — Cross-organizational support of teaching and learning, professional development and pathways, shifting roles of faculty and support staff
10. **LEARNING ANALYTICS** — Learning analytics enable proactive alerts on student performance, input for course improvement, and a customized learning environment
11. **WORKING WITH EMERGING TECHNOLOGY** — Methods for discovery, piloting, and scaling new technologies and the diffusion of innovative practices, all serving student and instructor success
12. **EVALUATION OF TECH-BASED INSTRUCTIONAL INNOVATIONS** — Tools and methods to gather and analyze evidence of learning effectiveness; using results to change curricular practice
13. **NEXT-GEN DIGITAL LEARNING ENVIRONMENTS & LMS SERVICES** — Campus digital learning environments and support services for the LMS are supported by open standards and component-based architecture
14. **PRIVACY & SECURITY** — Formulation of policies for increased sharing of data; educating faculty and students on best practices
15. **ADAPTIVE TEACHING & LEARNING** — Effective course integrations and adaptive technology designs; evaluation of learning impact and effect on student success
16. **INTEGRATED PLANNING & ADVISING FOR STUDENT SUCCESS** — Improvements in student success employing a combination of analytics, planning, advising, and early alerts

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2018 Key Issues in Teaching & Learning

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5. **DIGITAL & INFO LITERACIES** — Identifying and developing new student competencies in finding, evaluating, creating, and managing digital information in the 21st century
6. **INTEGRATED PLANNING & ADVISING** — Improvements in student success employing a combination of analytics, planning, advising, and early alerts
7. **INSTRUCTIONAL DESIGN** — Skills and competencies for designers; integration of technology into the profession; role of data in design
8. **ONLINE & BLENDED LEARNING** — Evolving course delivery methods combine traditional and online learning to serve on-campus students and remote learners alike
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12. **ADAPTIVE TEACHING & LEARNING**
13. **WORKING WITH EMERGING TECHNOLOGY**
14. **LEARNING SPACE DESIGNS**
15. **NGDLE & LMS**

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2019 Key Issues in Teaching & Learning

Each year, the EDUCAUSE Learning Initiative surveys the higher education community to determine key issues and opportunities in postsecondary teaching and learning. These issues serve as the framework, or focal points, for our discussions and programming throughout the coming year. For 2019, more than 1400 community members voted and identified the following:

1. **Faculty Development & Engagement** — Enabling faculty to craft active learning engagements that achieve learning objectives
2. **Online & Blended Learning** — Constructing course models to serve on-campus students and remote learners alike
3. **Instructional & Learning Experience Design** — Enhancing skills for designers and using data to inform design processes
4. **Digital & Information Literacy** — Nurturing student competencies in finding, evaluating, and creating digital information
5. **Accessibility & Universal Design for Learning** — Implementing effective practices and course designs accessible by everyone
6. **Competency & New Methods of Learning Assessment** — Creating the means to record and capture the entirety of learner accomplishments
7. **Learning Analytics** — Enabling proactive alerts on student performance and input for course improvement
8. **Open Education** — Promoting the creation of open resources, open curricular designs, and supportive policies
9. **Evaluating Instructional & Learning Innovations** — Employing tools and methods to gather and analyze evidence of learning effectiveness
10. **Academic Transformation** — Promoting the strategic transformation of the campus teaching and learning mission
11. **Adaptive Teaching & Learning** — Personalizing the ways of delivering instruction and mentoring to support all students
12. **Learning Spaces (including Makerspaces)** — Transforming classrooms into interactive spaces of discovery, inquiry, and making
13. **Microcredentialing & Digital Badging** — Creating new systems of documenting and publishing learner achievement
14. **Digital Learning Architectures** — Architecting digital learning environments that fully serve all learners and instructors
15. **Integrated Planning & Advising for Student Success (iPASS)** — Improving student success through integrated planning, advising, and technology

EDUCAUSE

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educause.edu/eli/initiatives

Learning Analytics or "Library Analytics"?

Institutional Focus

What does library engagement in these systems look like on your campus? How have you addressed privacy concerns, data protections, etc.?

Can such systems connect students more easily with information literacy and reference support? Increase the impact of the library on student learning? Improve collaboration with other support services?

What are the benefits, challenges, best practices, and emergent opportunities of using campus data systems to connect students and librarians in support of student learning and success?

How can librarians connect with these new ways of supporting student learning and success?

The opportunities you may have to bring the library into a meaningful discussion of institutional systems employed to support student success will depend on which systems and resources are available to you, and the locus of the campus discussion of data-informed approaches to student recruitment, retention, and successful completion of academic programs.

Where is your library on this continuum? Where is your campus?

Data are collected, but neither reported, nor shared, on campus

In this environment, data on student success, library use, or student use of other learner support services may be collected, but each is siloed and employed primarily for reporting purposes. There is little/no sharing of data across campus units and little effort to bring complementary programs together for a higher-level view of the complementary roles played in student success by academic affairs, student affairs, library services, IT services, etc. At this point in the continuum, there is little knowledge among campus units even of what data others collect, and data collected may be reported only within the unit or to external surveys such as the ACRL Statistics program.

Key questions to ask at this stage include: *how much library data are shared among the staff and employed in planning, decision-making, and service improvement* ("culture of assessment"); and, *how much communication there is across campus about the collection and use of data in support of student success* ("community of practice")?

Data are collected and made ... (tial)

In this environment, there is a data warehouse on campus, typically managed by an Information Technology unit. The warehouse may include ... improvement.

Data are collected and made ... (ed)

In this environment, additional campus units providing services with a direct impact on student success have worked with colleagues (e.g., ... for easier identification of opportunities for collaboration on programs aimed at impact on student success.

Key questions to ask at this stage remain: *how widely known is this more robust set of student data on campus; and, is there a mechanism to promote greater awareness, sharing, and use of available data in decision-making and service improvement?*

Data collection programs inform ca... of enterprise-level systems for o... (ent ...tics, ...rtics)

In this environment, campus has adopted one or more of the following enterprise-level systems: an online learning environment (e.g., Canvas); a ... development of these systems on campus and in the development of policy regarding access and use of data collected through these systems?

Campus expertise around data collection ... campus-wide commitment to student success is institutionalized and celebrated as a distinctive component of institutional culture of a ...

In this environment, academic administrators, student affairs professionals, librarians, and other records managers and data stewards work collaboratively and consistently to establish shared practices around the ethical use of data collected in these systems, educational programs promoting data literacy among teachers, students, and parents, and consistent requirements to be employed when negotiating for services with outside vendors regarding protection of student data. Data are routinely employed to demonstrate progress toward student success goals, and stories are shared, internally and externally, about how data are employed to ask meaningful questions about, and adopt innovative solutions, issues critical to enhancing student success.

Key questions to ask at this point include: *are we there, yet*; and, if not, *what can we do, as information professionals, to provide leadership for our campuses as they inevitably move toward adoption of these systems?*

No, this isn't readable.
This content is on the handout!
(also, in the conference app.)

Action Plan

Intent	How I Will Know I've Succeeded

How can you put what you learn here into action at home?

Action Step	Resources Needed	Responsible Parties	Timeframe

Connecting the Dots Across a Continuum of Engagement
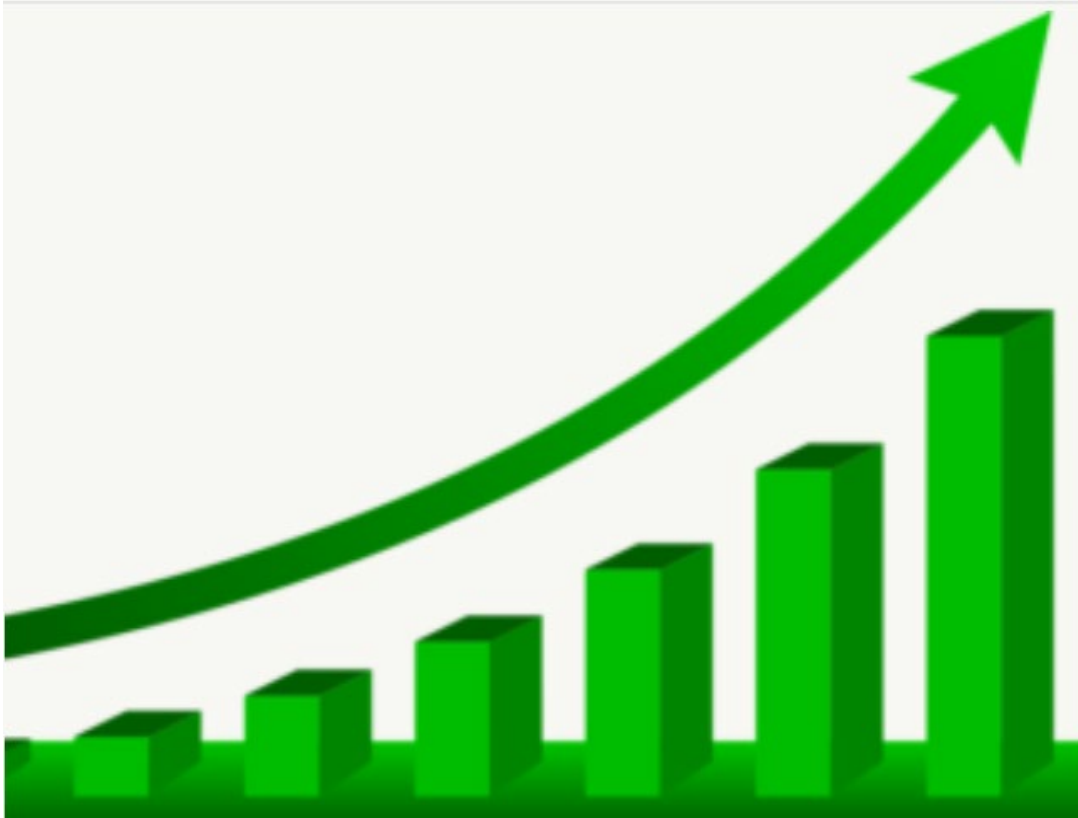
- Data Collection and Curation (in the library, in academic affairs, across campus)
- Recognition of the Value of Data Collection Related to Student Learning in Key Campus Initiatives
- Infrastructure for Collaboration, Communication, and Planning Based on Available Data
- Integration of Library Data and Expertise as Part of Campus Programs

DePaul University

- Urban, R2, teaching-focused university

- 22,437 students (14,507 undergraduates)

- Among Undergraduates
  - ~47% students of color or "nonresident alien"
  - ~33% first-generation
  - ~30% transfer students

- Engagement with campus learning analytics programs (2016-18)

Infrastructure of Engagement

- Enrollment Management & Marketing

- Management Information Group

- Executive Retention Group

Walter, S. (2014). Assessment is everywhere: Sharing assessment information and initiatives at DePaul University. *College & Research Libraries News, 75* (9). Retrieved from https://crln.acrl.org/index.php/crlnews/article/view/9195/10178

FACT FILE

COMMON DATA SET

INTERACTIVE REPORTS

RESEARCH MATRIX

Learning Analytics and the Strategic Plan

Enhance Academic Quality and Support Educational Innovation

- Focus the entire university community on student learning and success

- Build and retain an outstanding and diverse faculty, empowering faculty to realize their potential as teacher-scholars

- Develop distinctive, high-quality academic programs

- Enhance the visibility and profile of the university

V|2018 DEDICATION TO EXCELLENCE, COMMITMENT TO COMMUNITY

DePaul University
Office of the President – Strategic Directions
http://offices.depaul.edu/president/strategic-directions/vision-2018/Pages/goal-1-enhance-academic-quality-and-support-educational-innovation.aspx

Learning Analytics and Accreditation

"As part of the … reaccreditation process set out by the Higher Learning Commission of the North Central Association, DePaul is required to complete a 'major Quality Initiative' designed to suit its present concerns or aspirations. *Foundations for Success*, our Quality Initiative, is inspired by Vision 2018, which calls on us in Goal I … to "Focus the entire university community on student learning and success." *Foundations for Success* is a set of initiatives whose goal, over the next three years, is to improve the conditions for learning at DePaul so that more undergraduates complete their degree."

DePaul University
Office of Academic Affairs – Key Initiatives – Foundations for Success
http://offices.depaul.edu/oaa/key-initiatives/Pages/Foundations-for-Success.aspx

The Learning Commons

go.depaul.edu/learningcommons
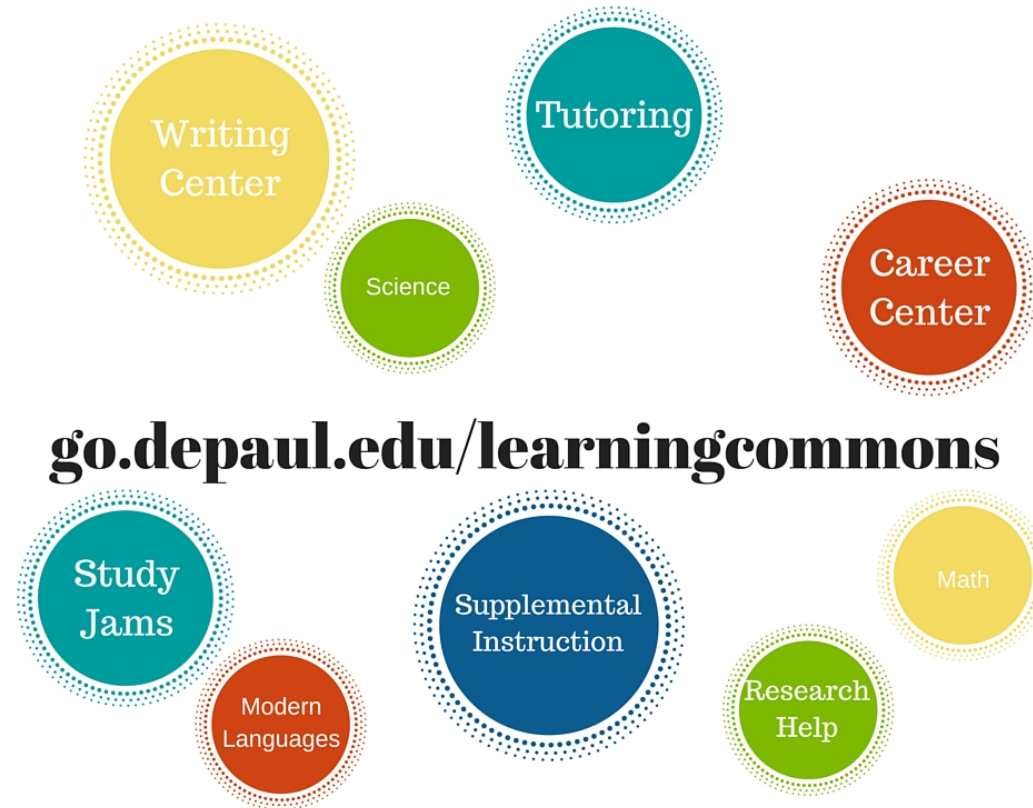
DePaul University Library
Learning Commons
http://library.depaul.edu/get-
help/Pages/learning-commons.aspx

BlueStar

- Enables instructors and advisors to send alerts if there are concerns about academic performance, "kudos" to acknowledge good performance, and referrals to additional support services.

- Enables online appointment scheduling with instructors, advisors and support service offices who may schedule through BlueStar.

- Provides students with a view of their "Success Network" in one place—includes information about current instructors and advisors.

- Includes a list of all student support offices that can help students.

DePaul University
Teaching Commons
BlueStar
http://resources.depaul.edu/teaching-commons/teaching/Pages/bluestar.aspx

[DePaul BlueStar] Library Research Help Referral in Introduction to Microbiology

BlueStar <BlueStar@depaul.edu>
Friday, September 9, 2016 at 10:56 AM
To:

Dear

You have been referred to the Library Research Help. To schedule a research consultation with a librarian, go to http://library.depaul.edu/get-help/ask-a-librarian/Pages/Make-an-Appointment.aspx

You may also visit the Library Research Help desk at:

- John T. Richardson Library, Lincoln Park, 2350 N. Kenmore Ave., 1st floor
- Loop Library, DePaul Center, 1 E. Jackson Blvd. 10th floor

We encourage you to take advantage of the resources available to you as a student at DePaul.

Sincerely,
BlueStar

BlueStar

Learn more at go.depaul.edu/BlueStar. For technical assistance, please contact BlueStar@depaul.edu.

University Departments

University Library

Home   Events   Forms   News   Polls

Join Now

Feed   Profile
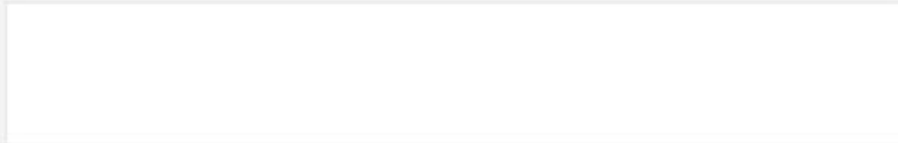
Portal Information

Description

The DePaul University Library is comprised of the John T. Richardson Library, the Loop Library, and library service programs delivered to DePaul's suburban campuses. Reflecting DePaul's institutional commitment to teaching and learning, DePaul librarians and library staff have embraced a vision for the library as "a center for intellectual inquiry and academic engagement beyond the classroom, building and inspiring the campus and community partnerships distinctive of a DePaul education."

Student Success @ DePaul

DePaul University
Student Success @ DePaul
https://resources.depaul.edu/student-success/

Peer Support Network

DePaul University
Peer Support Network
https://offices.depaul.edu/academic-affairs/initiatives/Pages/peer-support-network.aspx

"In the past, individual programs involving peers gathered data on student participation in their own program. However, we had no way to cross-reference any particular student's participation in multiple programs, or ... [to] identify those students who participated in no support programs at all. Thus one of the goals of the Peer Support Network is to create a system whereby we can track peers' contacts with students, along with the students' use of additional DePaul resources. With this system in place, we will be able, for the first time, to begin to evaluate the impact of peer support on students' persistence into their second year at DePaul and beyond."

University of Minnesota - Twin Cities

Large, urban, R1 university
Undergraduates: 31,455 (FY ~6,000) | Graduate & Professional: 16,000

Started exploring library data collection in 2011

inspired by Rec Center study ("Gym Bags and Mortar Boards")

Image by chrisgallevo on Flickr

GPA (2012)

Compared to their first-year peers who did not use the library, students who use the library at least once have

- Significantly higher **cumulative grade point averages** in their fall semester and first year
- Significantly higher **retention** to their second semester and second year of enrollment

Note: These findings held controlling sex, race/ethnicity, first-generation status, ACT scores, number of AP credits, and other collegiate experiences.

Retention (2016) (Used propensity score matching)

- Using the library at least one time in the first year of enrollment significantly increased the odds that students would graduate in four years OR remain enrolled after four years
- First year students who used electronic resources and books had significantly improved odds of graduation in four years

More at: http://z.umn.edu/ldsspubs

IPAS

APLUS is our IPAS

In 2016, we tested "electronic use" but too much data – need to develop meaningful* metrics to feed into the system

*What is meaningful?

Leaver's study

- Office of Undergraduate Education
- Much work has been done - next phases
- Tackling complex factors

UNDERSTANDING WHO LEAVES...

441 or 7.13% students did not re-enroll for fall 2018

er student
are applied
ysis. Students

Reasons students leave are very complex. There is not one single factor that predicts student success.

There are a few narratives for those who do not re-enroll:
- They struggle academically with a **GPA of 2.54 compared to 3.33** (statistically significant)
- 60% of leavers transfer to an institution (46% transfer to an institution in their home state often times to less rigorous schools)
  - 40% transfer to another 4-year institution
  - 20% transfer to a 2-year institution
- 40% Discontinue college entirely

*data provided by the National Student Clearinghouse for 2014 and 2015 cohorts

"Just in Time" pilot (Fall 2018)

- Going beyond advisor - more holistic
- Focused on 6 retention risk tags
- Weekly meeting - reviewed tags and implement outreach strategies
- Lessons learned:
  - APLUS training needed to encourage tagging
  - Tagging early helps for timely outreach
  - Students have complex situations - Need multiple strategies to support retention

Learning Analytics
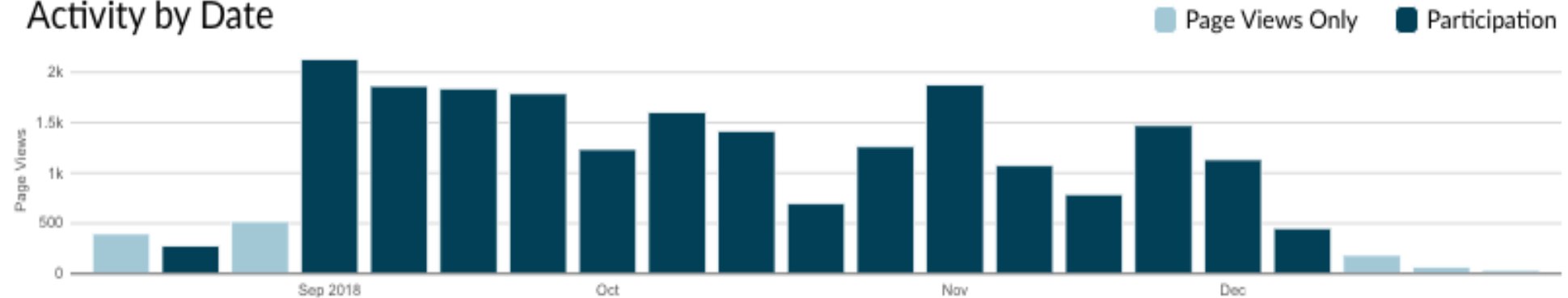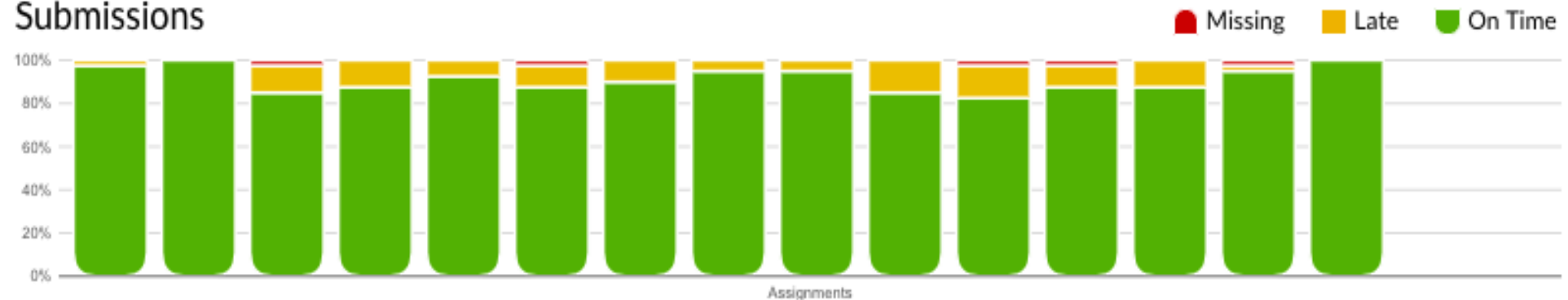
Learning Analytics - 2019

- Goal is to improve "analytics"
- Paper prototype – showing existing data in new ways
- Beginning to combine "academic" and "engagement" data -- (e.g. scatter plot with logins and quiz grades for example)

Pilot Project: Modules Progress Bar

- I want to know which students are missing assignments etc. because I want to reach out to them early.

- I want to know whether students are keeping up with the work because this is critical to their success in the course.

- I want to know which students are missing some number of assignments because if students are not completing work they are also often not coming to class and I don't see them to know they're struggling.

- I want to know what my students never click on because I need to figure out how to either make them realize it's important or get rid of it.

- I want students to see their progress in a graphical way because it can create motivation.

Learning Analytics - Privacy aspects

Student focus groups:
- Want faculty to use and act on the data in Canvas (Spring 2019 focus group)
- Want University to use and act on data in APLUS interactions with students (found over the last 10 years)
- Want training for faculty on how to use the system.

Canvas data prompt alert in IPAS

Unsatisfactory grades in multiple Moodle courses

Issued: Feb 25, 2017 01:22 PM (APLUS)

Courses: CLA 1002 & MATH 1271

Grades: Week 4 Module Assignment (due Sunday, Feb. 12th) (0.00/10.00 w=4.55%), Week 5 Module Assignment (due Sunday, Feb. 19th) (0.00/10.00 w=4.55%), MidTerm1 (8.00/60.00 w=16.67%)

Previous Alerts: 0

The student has earned an unsatisfactory grade and a two-week grade average less than 70% in multiple Moodle courses.

Alert variant	TP	TN	FP	FN	Accuracy	Recall	Precision
Poor grades, single course (2wk window)	1,945	42,542	11,969	332	78.3%	85.4%	14.0%
No logins, single course (3wk window)	595	53,455	1,056	1,682	95.2%	26.1%	36.0%
Poor grades, multiple courses (2wk window)	1,588	48,327	6,184	689	87.9%	69.7%	20.4%
No logins, multiple courses (1wk window)	782	51,165	3,346	1,495	91.5%	34.3%	18.9%
No logins, multiple courses (2wk window)	367	54,330	181	1,910	96.3%	16.1%	67.0%
No logins, multiple courses (3wk window)	222	54,461	50	2,055	96.3%	9.7%	81.6%

IPAS - Undergrad Ed Advisor led

Canvas/Curriculum Faculty led
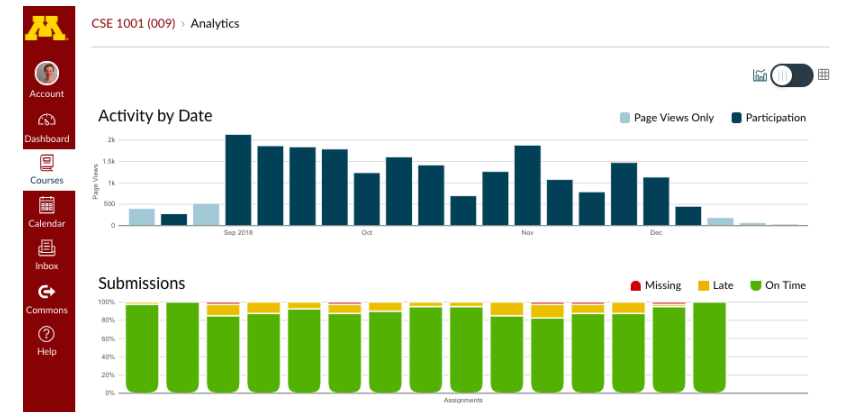
Where do Libraries fit?

Role for Libraries

- Early course engagement such as with course readings? Reserves? (e.g. alert from Canvas?)
- Support research papers and finding high-quality sources
- Social aspects (e.g. Study groups in the Libraries? Build study skills? Peer tutoring?)
- Textbook options (lower student costs)
- Support undergraduate research

- Became a University in 2001
- Roots in Gloucestershire: 1847 Cheltenham Training College
- 10,000 students
- **Teaching led, student centred**
- **Commitment to widening access and participation for students**
- Subject range: public services, social sciences, business, technology, humanities, arts and media
- 25% of intake from Gloucestershire, 25% South West, 50% rest of UK/overseas

UNIVERSITY OF GLOUCESTERSHIRE

Context

- Focus on impacts, outputs and outcomes (not inputs and activity)

- Funding accountability and 'value'

- Student wellbeing

Aims (stay focussed!)

- To help students succeed by giving them feedback on their study approach and engagement so they can control their learning

- To give data support to Personal Tutors to inform their discussions with Tutees, and to provide timely prompts for intervention

- Do not overpromise: What if resource is not there? Real world problems

- Do not get carried away: management info, curriculum design, intelligent campus, descriptive vs predictive, wellbeing etc.

The Library and learning analytics

- I am a librarian who is responsible learning analytics in my institution

- Two library engagement visualisations within the "Tutor Portal" dashboard

- Gloucestershire's relationship with OCLC brought daily EZ-proxy feeds into Jisc's data warehouse plus circulation data from the World Share Management platform

- Module level data feeds in a student RAG rating
  - VLE (a.k.a. LMS) usage
  - Reading list usage
  - Attendance
  - Assignment submission and marks

- Next = Footfall via library turnstiles and attendance at information literacy sessions

Privacy

- GDPR has raised the profile of data protection

- Consent? No, part of our mission and values as a University

- Rewrote the student contract and charter

- Student view = 5% love it/5% hate it/90% don't care

- Librarians are concerned

- Data is broad brush. It is a student's "heartbeat"

- Differentiate between required reading (fair game) and wider reading (not!)

Principles

- Being clear on not using data for assessment. Is anonymous marking a logical conclusion?

- Have yet to determine our approach to Predictive analytics – interesting conversations to come

1. *We will be transparent about data collection, sharing, consent and responsibilities.*

2. *We will abide by ethical principles and align with our university strategy, policies and values.*

3. *Learning Analytics will not be used to inform significant action at an individual level without human intervention.*

Connecting students with information literacy and reference support

- We identify students not engaging with the library rather waiting for them or just telling anyone who'll listen

- They can see the data and compare themselves to their cohort

- Basics: Ensure the links to support service information are correct, up to date and centralised

  - Tutor portal: the place where the tutor sees the data, records the intervention and accesses the referral support if required

  - MyGlos app: the place where the student sees the data, sets targets and alerts, finds a tutorial/books an appointment

Benefits and challenges

- The library is front and centre of student engagement and learning

- Connect the dots from library use to outcomes

- Raise our profile in the minds of academics

- Improve collaboration by working with student support colleagues to record interventions and refer from one place

- Close the loop to impact: issue flagged by the data > intervention and potential referral recorded > uptick in engagement/retention/outcomes?

- We are getting busier: 1 to 1 referrals from academics up by 20% in the last year but times are tough in UK HE

- How do we balance increased learning and wellbeing support for students in this context?

How do librarians connect with learning analytics?

- Old fashioned relationships between faculty and library can be enhanced. It is a good reason to engage if the library is part of the picture

- Embraced the role of collaborator in the student's learning alongside the academics
  - co-curator
  - co-creator
  - co-supporter

- Is it appropriate for librarians to view the full learning data?

- Less teaching – currently 800 hours across 6 librarians! Prep time etc

- Move to a combination of online delivery and data driven support

Anne Barker
University of Missouri – Columbia
30,000 students
300 degree programs

MU Connect, local brand of Starfish system.
Library integration beginning Summer 2017.
22 librarians involved.

Starfish

MU Connect
University of Missouri

Dashboard

Display hidden items

WEDNESDAY   **TODAY**

No items scheduled today. Enjoy your day!

Recent Kudos

★ Showing Improvement

★ Outstanding Academic Performance

2

MONDAY   **07-09-2018**

8:00 am

📅 **Appointment**

ⓘ Reason: Tutoring Assistance

📍 126 Jesse Hall

👤 Christina Balser

Load more...

HIDE

➡️ **Wellness Resource Center- BASICS Marijuana Referral**

👤 Added by Tiffany Bowman

📅 Added on 05-01-2017

ⓘ You have been referred to the BASICS program due to your drug policy ... ▾

Go to http://www.3rdmilclassrooms.com/

Click on Begin Enrollment on the left side menu and scroll down to "Coll...

When you are directed to Enter Control Number, enter this code: MIZUMJ

Do not include payment or credit card information on the enrollment for...

After completing this quiz, bring two copies of your Echeckup and ...

To schedule your one hour follow up session, go to MU Connect via Bla...

HIDE

☑️ **Complete MU Outcomes Survey**

Search services and people 🔍

How can we help?

Your Connections

Christina Balser
Academic Advisor ▼

Kayla Klein
Financial Aid Advisor ▼

Jeremy Wiebold
RESLIFE Hall Coordinator ▼

Your Services

ENGINEERING

College of Engineering

The College of Engineering includes 9 disciplines, 113 faculty members, 2,900 of the brightest undergraduates on campus and over 500 exceptional graduate students. College of Engineering Advising Phone: 573-882-7437 Email:

Student Success Center

The mission of the Student Success Center is to work with you to help you define, clarify, and achieve your academic, personal, and professional goals. Academic Exploration and Advising Services (AEAS) E-mail:

Choose your Class

🎓 Courses

FS2018 ⌄

Active

All

FS2018 ○

...nformation Technology (Lect/Stand) (FS2018.IS_LT.7301.03)

Gail Eubanks
✉ EubanksG@missouri.edu
📅 Online scheduling not available

INSTRUCTOR

Schedule a Research Consultation Appointment with Kimberly Moeller

🅜🅤 Libraries
University of Missouri

SERVICE

The Writing Center

🅜🅤
Writing Cente
niversity of Misso

SERVICE

🎓 IS_LT 7301: Introduction to Information Technology (Lect/Stand) (FS2018.IS_LT.7301.04)

NETWORK

Gail Eubanks
✉ EubanksG@missouri.edu
📅 Online scheduling not available

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🅜🅤 Libraries
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SERVICE

What does library engagement in these systems look like on your campus?

Library services and subject librarians are listed in "my success network". A subject librarian is associated with each course.

All consultations are logged in MU Connect and included in the student record.

Advisors and instructors can see the library connection and refer students to librarians through MU Connect.

Collaboration with the MU Connect team, providing input and testing features.

Benefits:

Presence in an online environment increasingly familiar to our students.

Ease of communication and scheduling with students.

Library data included in records used outside the libraries to measure student success.

Opportunity to make the educational role of librarians more visible to administration.

Challenges:

Yet another new system to learn…

Adapting a system not originally designed with libraries in mind.

Additional effort communicating with external units.

Dependent on good promotion of the role of libraries in student learning.

The volume of library contacts may appear small compared with other services.

Best practices:

Sensitivity to issues of privacy and confidentiality.

Consistent marketing and presentation of library services.

One main contact coordinating a nimble implementation team.

Phased implementation and ongoing evaluation and adaptations.

Plan with assessment in mind.

Make sure data is clear and consistent.

How can librarians connect with these new ways of supporting student learning and success?

Be patient (with all participants) and prepare the ground.

Build on established relationships and past projects.

Emphasize common goals.

Express gratitude.

The opportunities you may have to bring the library into a meaningful discussion of institutional systems employed to support student success will depend on which systems and resources are available to you, and the locus of the campus discussion of data-informed approaches to student recruitment, retention, and successful completion of academic programs.

Where is your library on this continuum? Where is your campus?

In this environment, data on student success, library use, or student use of other learner support services may be collected, but each is siloed and employed primarily for reporting purposes. There is little/no sharing of data across campus units and little effort to bring complementary programs together for a higher-level view of the complementary roles played in student success by academic affairs, student affairs, library services, IT services, etc. At this point in the continuum, there is little knowledge among campus units even of what data others collect, and data collected may be reported only within the unit or to external surveys such as the ACRL Statistics program.

Key questions to ask at this stage include: *how much library data are shared among the staff and employed in planning, decision-making, and service improvement* ("culture of assessment"); *and, how much communication there is across campus about the collection and use of data in support of student success* ("community of practice")?

Data are collected, but neither reported, nor shared, on campus

In this environment, there is a data warehouse on campus, typically managed by an Information Technology unit. The warehouse may include standard data points, e.g.,

...jectively are examples... of innovative use of the data warehouse to inform planning, decision-making, and service improvement?

Data are collected and made availabl...

In this environment, additional campus units providing services with a direct impact on student success have worked with colleagues (e.g., Institutional Research) to: a)

data, allow for greater coordination of data collection and reporting programs among complementary programs and for easier identification of opportunities for collaboration on programs aimed at impact on student success.

Key questions to ask at this stage remain: *how widely known is this more robust set of student data on campus; and, is there a mechanism to promote greater awareness, sharing, and use of available data in decision-making and service improvement?*

Data are collected and made availabl...

In this environment, campus has adopted one or more of the following enterprise-level systems: an online learning environment (e.g., Canvas); a learning analytics/IPASS

...libraries available through these systems; and, is there library involvement in the initial design and ongoing development of these systems on campus and in the development of policy regarding access and use of data collected through these systems?

Data collection programs inform campus ad... of enterprise-level systems for online le... and...

In this environment, academic administrators, student affairs professionals, librarians, and other records managers and data stewards work collaboratively and consistently to establish shared practices around the ethical use of data collected in these systems, educational programs promoting data literacy among teachers, students, and parents, and consistent requirements to be employed when negotiating for services with outside vendors regarding protection of student data. Data are routinely employed to demonstrate progress toward student success goals, and stories are shared, internally and externally, about how data are employed to ask meaningful questions about, and adopt innovative solutions, issues critical to enhancing student success.

Key questions to ask at this point include: *are we there, yet; and, if not, what can we do, as information professionals, to provide leadership for our campuses as they inevitably move toward adoption of these systems?*

Campus expertise around data collection, sharin... campus-wide commitment to student success is institutionalized and celebrated as a distinctive component of institutional culture

No, this isn't readable.
This content is on the handout!

Have we explained what **IPAS, early alert, and engagement systems** are? What questions do you still have?

Do you have ideas for **new opportunities** to **connect with students** using such systems in order to support student learning and success efforts? Who can you connect with on your campus?

Can you **make informed decisions** and **take actions** regarding library involvement and integration into campus IPAS, early alert, and engagement systems? If not, what more can we share with you?

Connect the Campus Data Dots: Using Institutional Systems to Support Students When They Need It Most

#acrlipas

Megan Oakleaf, Scott Walter, Kate Peterson, James Hodgkin, Anne Barker, Malcolm Brown

Integrated Planning & Advising for Student Success (IPASS) Systems
Early Alert Systems
Engagement Systems

Libraries &
Student Point of Need

Starfish

MU Connect
University of Missouri

Dashboard

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SERVICE

The Writing Center

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MU
Writing Center
University of Missouri

🎓 IS_LT 7301: Introduction to Information Technology (Lect/Stand) (FS2018.IS_LT.7301.04)

NETWORK

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MU Libraries
University of Missouri
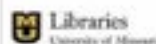
SERVICE

Infrastructure of Engagement

- Enrollment Management &

  Marketing

- Management Information Group

- Executive Retention Group

Walter, S. (2014). Assessment is everywhere: Sharing assessment information and initiatives at DePaul University. *College & Research Libraries News, 75* (9). Retrieved from https://crln.acrl.org/index.php/crlnews/article/view/9195/10178

FACT FILE

COMMON DATA SET

INTERACTIVE REPORTS

RESEARCH MATRIX

GPA (2012)

Compared to their first-year peers who did not use the library, students who use the library at least once have

- Significantly higher **cumulative grade point averages** in their fall semester and first year
- Significantly higher **retention** to their second semester and second year of enrollment

Note: These findings held controlling sex, race/ethnicity, first-generation status, ACT scores, number of AP credits, and other collegiate experiences.

Retention (2016) (Used propensity score matching)

- Using the library at least one time in the first year of enrollment significantly increased the odds that students would graduate in four years OR remain enrolled after four years
- First year students who used electronic resources and books had significantly improved odds of graduation in four years

More at: http://z.umn.edu/ldsspubs

The Library and learning analytics

- I am a librarian who is responsible learning analytics in my institution

- Two library engagement visualisations within the "Tutor Portal" dashboard

- Gloucestershire's relationship with OCLC brought daily EZ-proxy feeds into Jisc's data warehouse plus circulation data from the World Share Management platform

- Module level data feeds in a student RAG rating
  - VLE (a.k.a. LMS) usage
  - Reading list usage
  - Attendance
  - Assignment submission and marks

- Next = Footfall via library turnstiles and attendance at information literacy sessions

Connecting students with information literacy and reference support

- We identify students not engaging with the library rather waiting for them or just telling anyone who'll listen

- They can see the data and compare themselves to their cohort

- Basics: Ensure the links to support service information are correct, up to date and centralised

  - Tutor portal: the place where the tutor sees the data, records the intervention and accesses the referral support if required

  - MyGlos app: the place where the student sees the data, sets targets and alerts, finds a tutorial/books an appointment

Privacy

- GDPR has raised the profile of data protection

- Consent? No, part of our mission and values as a University

- Rewrote the student contract and charter

- Student view = 5% love it/5% hate it/90% don't care

- Librarians are concerned

- Data is broad brush. It is a student's "heartbeat"

- Differentiate between required reading (fair game) and wider reading (not!)

Principles

▪ Being clear on not using data for assessment. Is anonymous marking a logical conclusion?

▪ Have yet to determine our approach to Predictive analytics – interesting conversations to come

1. *We will be transparent about data collection, sharing, consent and responsibilities.*

2. *We will abide by ethical principles and align with our university strategy, policies and values.*

3. *Learning Analytics will not be used to inform significant action at an individual level without human intervention.*

How often do you use the following resources available at the Engineering Library (online)?

Resource	Weekly	Daily
Items for short-term checkout like textbooks, chargers, dry-erase markers, laptops, and other equipment	33.3%	18.1%
Live help with directions, homework, technology, and finding information from library staff	18.1%	15.3%
Other checkout items like books on the general shelves, journals, newspapers, & comic books	8.6%	10.0%
Study rooms and group or individual seating	30.6%	38.9%
Technology, including printers, computers, and specialized software	25.4%	53.5%

How often do you use the following resources available at the Engineering Library?

Items for short-term checkout like textbooks, chargers, dry-erase markers, laptops, and other equipment
- Once a semester or less: 29.2%
- Monthly: 19.4%
- Weekly: 33.3%
- Daily: 18.1%

Live help with directions, homework, technology, and finding information from library staff
- Once a semester or less: 37.5%
- Monthly: 29.2%
- Weekly: 18.1%
- Daily: 15.3%

Other checkout items like books on the general shelves, journals, newspapers, & comic books
- Once a semester or less: 54.3%
- Monthly: 27.1%
- Weekly: 8.6%
- Daily: 10.0%

Study rooms and group or individual seating
- Once a semester or less: 15.3%
- Monthly: 15.3%
- Weekly: 30.6%
- Daily: 38.9%

Technology, including printers, computers, and specialized software
- Once a semester or less: 14.1%
- Monthly: 7.0%
- Weekly: 25.4%
- Daily: 53.5%

Legend: Once a semester or less, Monthly, Weekly, Daily

Describe how you feel the library fits into your routine at the College of Engineering (choose all that apply)

- 21.39%
- 30.35%
- 31.34%
- 16.92%
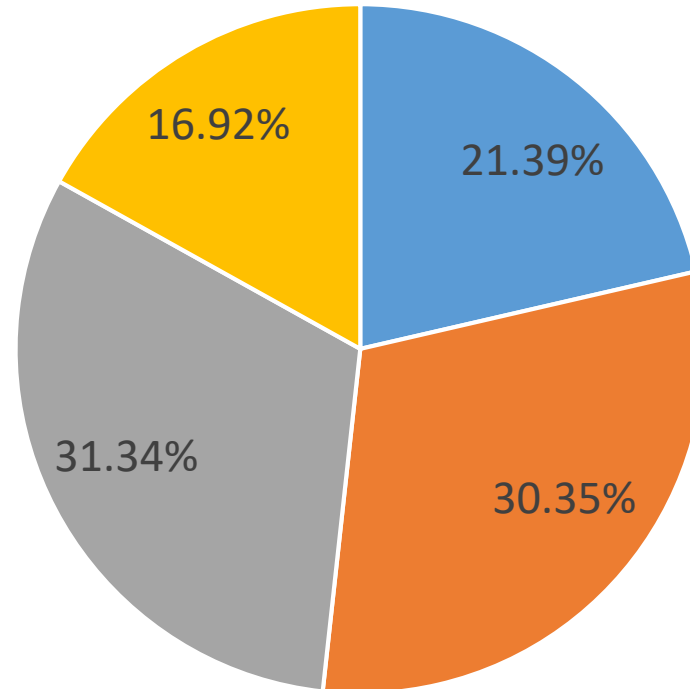
■ I see the library as a place I can go to relax between classes

■ I see the library as a place for studying

■ I see the library as a place to use the computers, printers, and other technology

■ I see the library as a good place to ask for help with homework and finding information

How much has the accessibility of the College of Engineering Library contributed to the success of your path in engineering? (check one) %
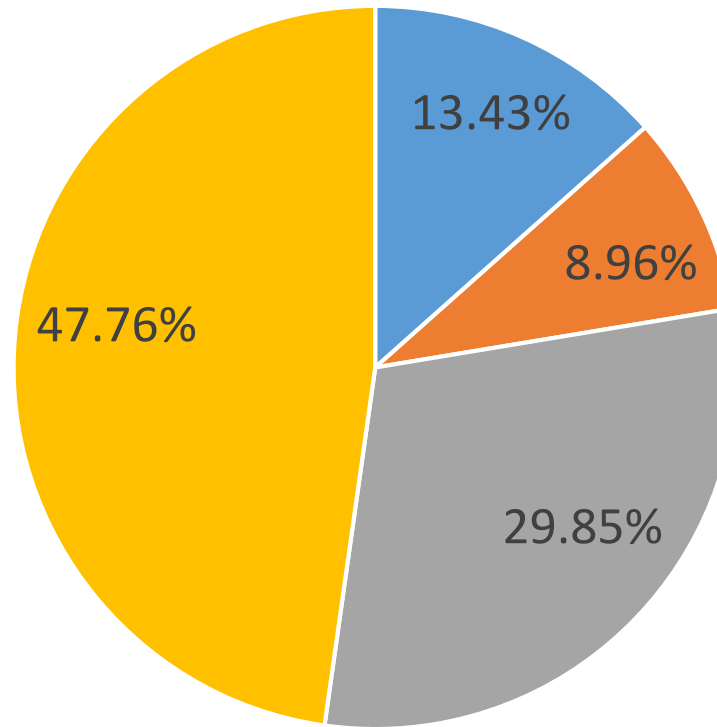
- Did not contribute at all: 13.43%
- Contributed somewhat: 8.96%
- Contributed a lot: 29.85%
- Is essential to my success: 47.76%

CNI RECAP

https://www.cni.org/events/membership-meetings/past-meetings/spring-2019

"Scholarly Orphans"

Martin Klein, Los Alamos National Laboratory
Herbert Van de Sompel, Data Archiving and Networked Services

- Researchers deposit lots of outputs all over the web. Github, Figshare, SlideShare, OSF, Zenodo…

- No archival framework exists for most of these things, long-term access uncertain

- Challenges: differentiating professional from personal contributions; what is the "boundary of the artifact?"; dynamic content and interactive features

- http://tracer.mementoweb.org and https://myresearch.institute

Daniel

Artifact

Artifact URLs:

- https://github.com/USRSE/blog/pull/10

Published	2019-05-15T14:46:54Z
Researcher	Daniel Katz
ORCID	https://orcid.org/0000-0001-5934-7525
Portal	Github
User	danielskatz

attempt to add a subset of my blog posts by danielskatz · Pull Request #10 · USRSE/blog

Preserved by SCHOLARLYORPHANS.ORG

Dismiss Join GitHub today GitHub is home to over 36 million developers working together to host and review code, manage projects, and build software together. Sign up

github.com @ 2019-05-16T05:16:20Z

Other Versions || Current version

Resources Captured

Mementos:

- https://scholarlyorphans.org/memento/20190516051620/https://github.com/USRSE/blog/pull/10

WARCs:

- https://myresearch.institute/capture/warc/WARCPROX-20190516051620961-00000-t9dp2zvs.warc

Events

- Tracker - 894616cf25554ab0b6cc325856a9aa54 - 2019-05-16T05:11:37Z
- Capture - capdd8317f17f6465520ccecdcb20140ec5 - 2019-05-16T05:17:33Z
- Archiver - arca5533cdfb67a4b8cb1c17a8219f906a9 - 2019-05-16T05:24:04Z

🖥 USRSE / blog

| 👁 Watch | 4 | ★ Star | 0 | ⑂ Fork | 0 |

<> Code   ⚠ Issues 2   🔀 Pull requests 0   📋 Projects 0   📊 Insights

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Dismiss

GitHub is home to over 36 million developers working together to host and review code, manage projects, and build software together.

Sign up

attempt to add a subset of my blog posts #10

New issue

🔀 **Merged**   vsoch merged 2 commits into `master` from `danielskatz-patch-1` 🔀 May 15, 2019

💬 Conversation 7   ⊙ Commits 2   ✓ Checks 0   📄 Files changed 1

+5 −0 ■■■■■

danielskatz commented May 15, 2019

Contributor   ...

No description provided.

attempt to add a subset of my blog posts   Verified ✓ 79256b4

vsoch commented May 15, 2019

Member   ...

okay, looks like we found your feed and created a folder:

∨ Generate markdown posts from the feed

```
$ #!/bin/bash -eo pipefail
  cd ~/repo/script
```

Reviewers

🟣 vsoch   ✓

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

"Scholars as Collectors"
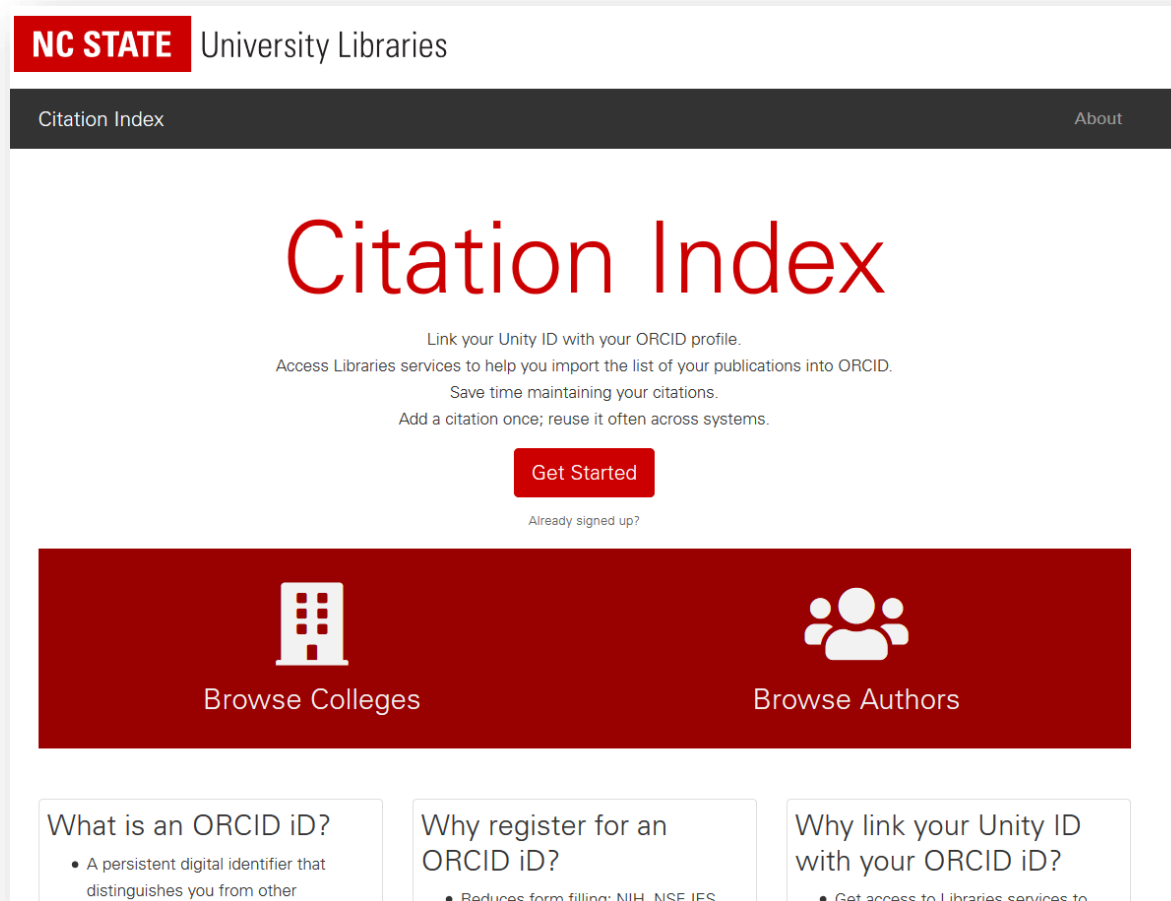
Oya Y. Rieger, Ithaka S+R
Danielle Cooper, Ithaka S+R

- Researchers collect LOTS of things/data/web pages…

- Heterogeneous content types; variety of formats; non-linear, iterative workflows

- Varying models for supporting scholarly collecting from entities like funders, open data groups, vendors, and academic institutions

- Ways forward: design services directly targeting scholars as curators; reframe "research data mgmt." to be more inclusive; promote digital fluencies for the entire academic community; seek opportunities to collaborate with research workflow tool providers; develop policies and guidance; recognize physical media is still a thing!

- Comment: scholars are wary of institutional solutions due to difficulties when changing institutions. Also they stick with tools and continue to use them wherever they go

ORCID

- NCSU Citation Index https://ci.lib.ncsu.edu

NC STATE UNIVERSITY LIBRARIES ORCID SERVICES

- Send us your CV to update your Citation Index profile.

- We will enrich your citations by searching for DOIs and open access copies.

- Your publications listings on some college and department faculty directory pages will automatically update.

- Receive hands-on support for getting your publications into ORCID and maintaining your profile.

- Invite us to a faculty meeting to present on ORCID and help get everyone signed up.

- Sign up to be notified of more services coming soon!

Contact the Libraries for support at
group-lib-citations@ncsu.edu

Web Archives

Michael L. Nelson, Old Dominion University

- Closing Plenary

- https://www.cni.org/events/membership-meetings/past-meetings/spring-2019

Real HTML pages are complex

"Look on my Javascript, ye Mighty, and despair!"

```
function random_imglink(){
    myimages[1]="/congress112th/20130119060624/http://www.fws.g
    ov/home/feature/home-banner/open-spaces/bannerbluemnt.jpg";
    myimages[2]="/congress112th/20130119060624/http://www.fws.g
    ov/home/feature/home-banner/open-spaces/bannereagle.jpg";
    myimages[3]="/congress112th/20130119060624/http://www.fws.g
    ov/home/feature/home-banner/open-spaces/bannertiger.jpg";

    var ry=Math.floor(Math.random(1)*myimages.length)

    if (ry==0)
        ry=1

    document.write('<a href='+'"'+imagelinks[ry]+'"'+'><img
    src="'+myimages[ry]+'" border="0" alt="The Open Spaces
    Blog. A Talk on the Wild Side. Click to Read"></a>')
}
```

OLD DOMINION UNIVERSITY

15:12

Actually, the fws.gov example was super easy; most changes are much harder to trace

Mohamed Aturban, unpublished, memento:
http://web.archive.org/web/20130724144801/http://www.cnn.com/
Animated GIF: https://blog.dshr.org/2017/11/keynote-at-pacific-neighborhood.html

- Zombies: live web "leaking" into an archived page (*mostly*, probably fixed at IA)

- Temporal Violations: reconstructing archived resources into a page that never really existed. "There are cases where this begins to look like tampering"

Cookies + Javascript =
A combo Urdu / Portuguese / English *page that never existed*

CNI Spring 2019 Membership Meeting, 2019-04-09,
@machedude_mln, @WebSciDL
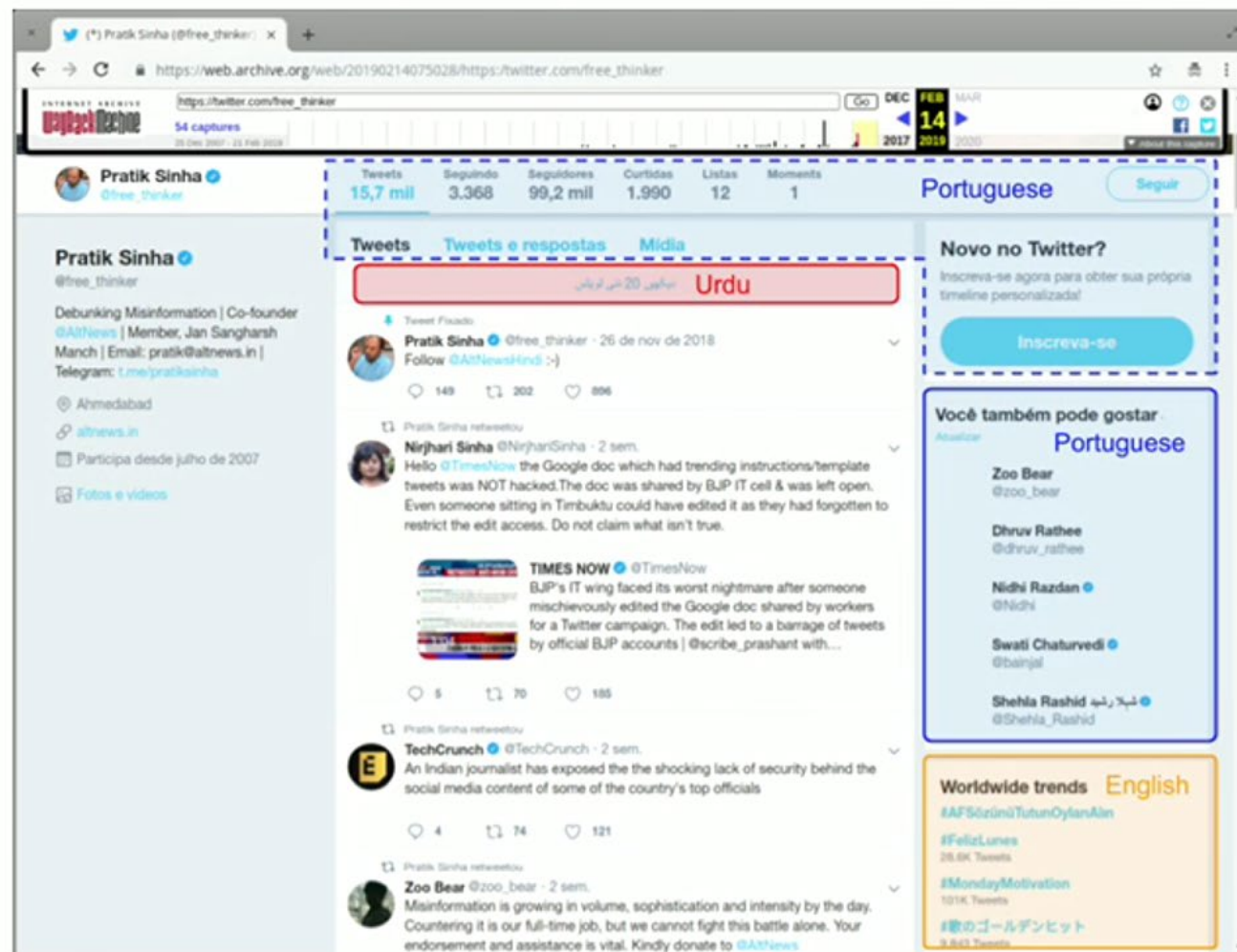
Web archives are unreliable narrators.

Unreliable narrators cause us to question everything we've been told.

Services

- Research Computing
  - About Research Computing
    - Now Hiring (HPC Systems Administrator)
  - Account Request/Getting Started
  - Computing Resources

Cyberinfrastructure Day 2019

The Cyberinfrastructure Council will hold CI Day at the MU Memorial Union Stotler Lounge on Tuesday, May 7, 2019. This year's theme is *Collaboration through Shared Infrastructure.*

CI Day fosters collaboration, networking, and collective problem-solving. Attendees will learn more about advanced computing technologies across a wide range of disciplines.

12:30 – 1:35 p.m.   **Protecting your Research Data**

Special Agent Sammy Chiang and Supervisory Special Agent George Schultzel

Two presentations

Topic: Cyberterrorism and espionage

- Special Agent Sammy Chiang

Topic: Protecting yourself and your data

- Supervisory Special Agent George Schulte

Cyberterrorism and espionage

- Counterintelligence
  - Has as a mission to defeat hostile intelligence activities targeting the US
- Interest in academia
  - Academic freedom > Universities are often not very guarded, unlike industry and some other countries

- A lot of countries are trying to get our research
  - People study here
  - Governments recruit talent from the United States
  - Get it by other means

- All research is threatened by countries and companies

Foreign talent recruitment programs

- Threat can be from any country

- China presents the greatest threat right now
  - Government sponsored
  - Recruits U.S. based researchers
  - People are enticed by high pay, titles

- Researchers may be witting or unwitting participants

MU

Tim M.:

- The conflict of interest form is being revised to include this information

- University is trying to prevent issues and comply with federal regulations

Protecting yourself and your data

- Weakest part of any security system is you
- Hacking a human is much easier than hacking a business using social engineering
- Exploit people and their good nature
- Methods: links or attachments in an email, chat messages, or phone call

Possible actions

1- Do not use the internet

of

2- Be mindful of what you put on the internet
  - Be mindful of what comes in

Be mindful. The information you put on social media stays forever.

Social media

- The information you post can be used against you
  - More than any place else, U.S. is being targeted
  - Substantial resources are being used by other governments
  - Information about specific people can be developed from social media
    - Twitter
    - Facebook
    - Information can be collated
    - Tailored messages are created for people

Google

- Can see emails, documents, etc.
- Companies use Google and private companies to research your online presence

Best practices

- Do not engage with or "friend" people you do not know

- Limit the amount of personal information you share (includes information about family and friends)

- Remember that what you post stays forever (somewhere)

- Password security (next slide)

Password security

- Do not use the same passwords for different sites
- Make sure your password is secure
- Length beats complexity every time
  - 30 ones (111111111...) is more secure than YuJ4oer
- Best:
  - 18 characters
  - No words
  - Use pass phrases
    - FrancineIsTheBestCatInTheWorld1! = fithbcitw1!

Images from: https://commons.wikimedia.org/wiki/

What can you tell about the person who owns this car?

Images from advertisements on: https://www.familystickers.com/family-car-stickers

Other

- Cover microphone and camera on devices
- Use antivirus, firewalls, VPNs and other security tools whenever possible
- Never click on links or attachments
- Be aware: Remote access tools (RAT) are on the rise
  - Software used to remotely access or control a computer
  - This tool can be used legitimately by system administrators for accessing client computers.