



Nudging Students to Success: reaching out via smart phones, personalized support, and the new LMS

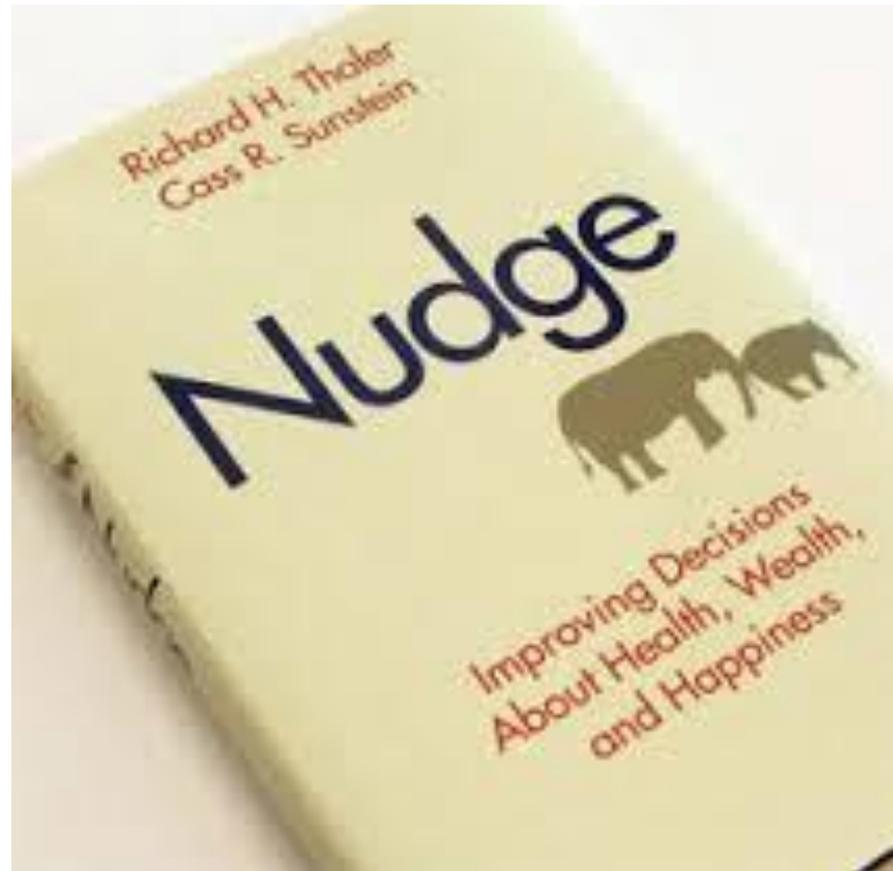
Colleen Carmean | University of Washington Tacoma

Transforming Culture with Technology

Defining new practice in teaching and learning, BUT how to imagine new use and new roles in supporting student success?

+ History of Nudge: Economics

- 2008
- Sunstein and Thaler
- Nudging people to better decisions through *choice architecture*

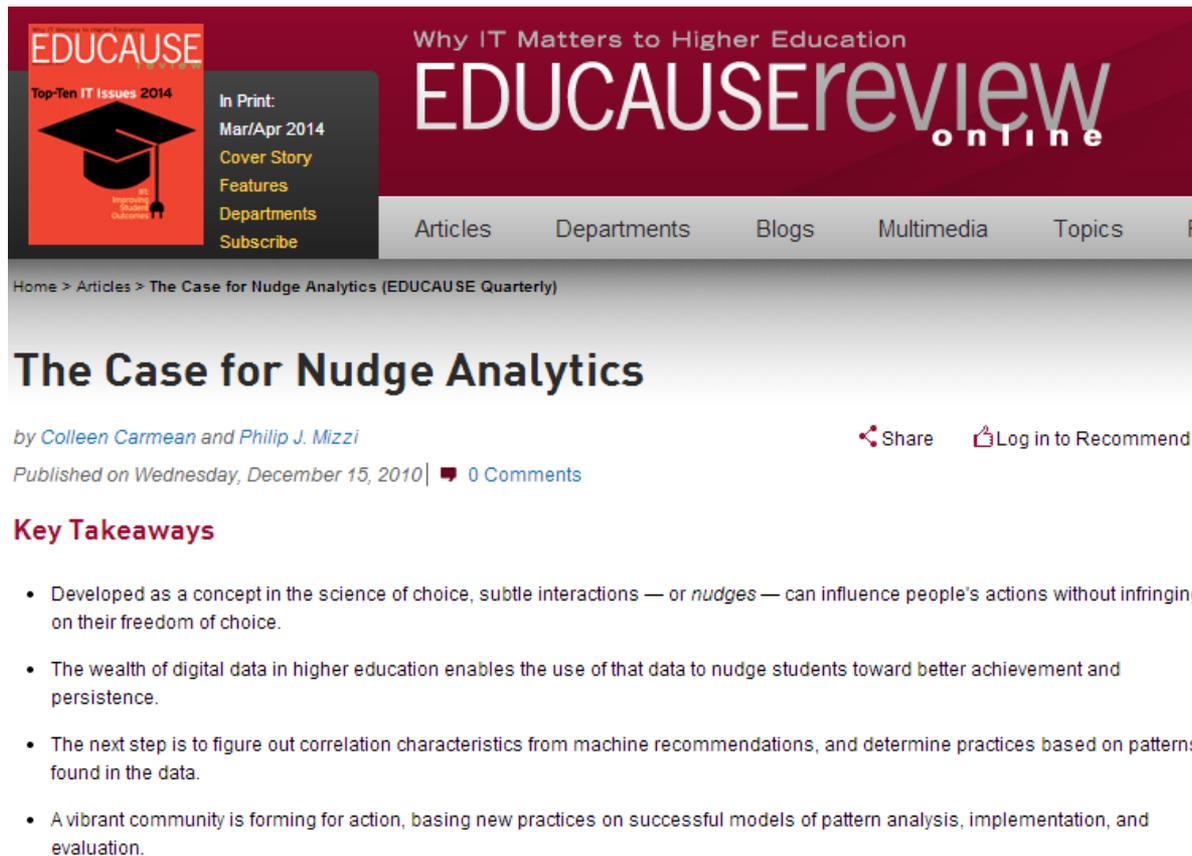


+ • Nudges from *Nudge*

- 80/20 rule for countries that issue IDs with organ donation status. Choose the default status on the form.
- Carving a bug in the Amsterdam airport urinals reduced “spillage” by 80%
- Opt out savings plans: 80% save
- **Nudging people to make good choices within their own free will decisions.**



+ History of Nudge: Education Analytics



The screenshot shows the top portion of a web page from EDUCAUSE review online. The header features the EDUCAUSE logo on the left, a navigation menu with links for Articles, Departments, Blogs, Multimedia, Topics, and Print, and the main title 'EDUCAUSE review online' with the tagline 'Why IT Matters to Higher Education'. Below the header, the breadcrumb trail reads 'Home > Articles > The Case for Nudge Analytics (EDUCAUSE Quarterly)'. The article title 'The Case for Nudge Analytics' is prominently displayed, followed by the authors 'by Colleen Carmean and Philip J. Mizzi' and the publication date 'Published on Wednesday, December 15, 2010 | 0 Comments'. A 'Key Takeaways' section is highlighted in red, containing four bullet points. At the top right of the page, there is a vertical purple bar.

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Home > Articles > The Case for Nudge Analytics (EDUCAUSE Quarterly)

The Case for Nudge Analytics

by *Colleen Carmean and Philip J. Mizzi*

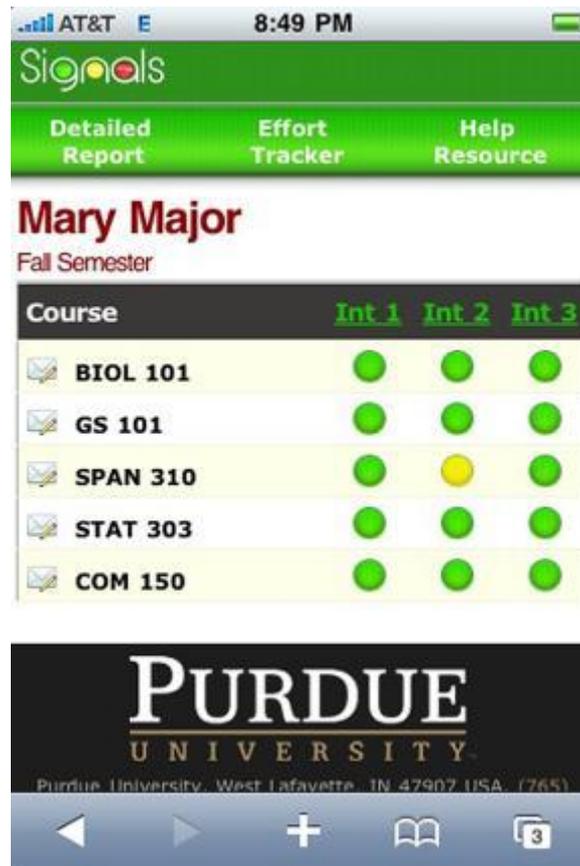
Published on Wednesday, December 15, 2010 | 0 Comments

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Key Takeaways

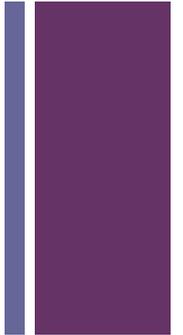
- Developed as a concept in the science of choice, subtle interactions — or *nudges* — can influence people's actions without infringing on their freedom of choice.
- The wealth of digital data in higher education enables the use of that data to nudge students toward better achievement and persistence.
- The next step is to figure out correlation characteristics from machine recommendations, and determine practices based on patterns found in the data.
- A vibrant community is forming for action, basing new practices on successful models of pattern analysis, implementation, and evaluation.

+ A Famous, First Case



Changing Practice via
new technologies,
ubiquitous connectivity
and DATA

+ Technology Revolution



+ Nudges and Learner Persistence

- Reaching students anytime/everywhere via their mobile devices.
- Reminding, supporting, personalizing, preparing by smart machine sorting of behavior.
- Nudging to new behaviors



+ The New Traditional Student



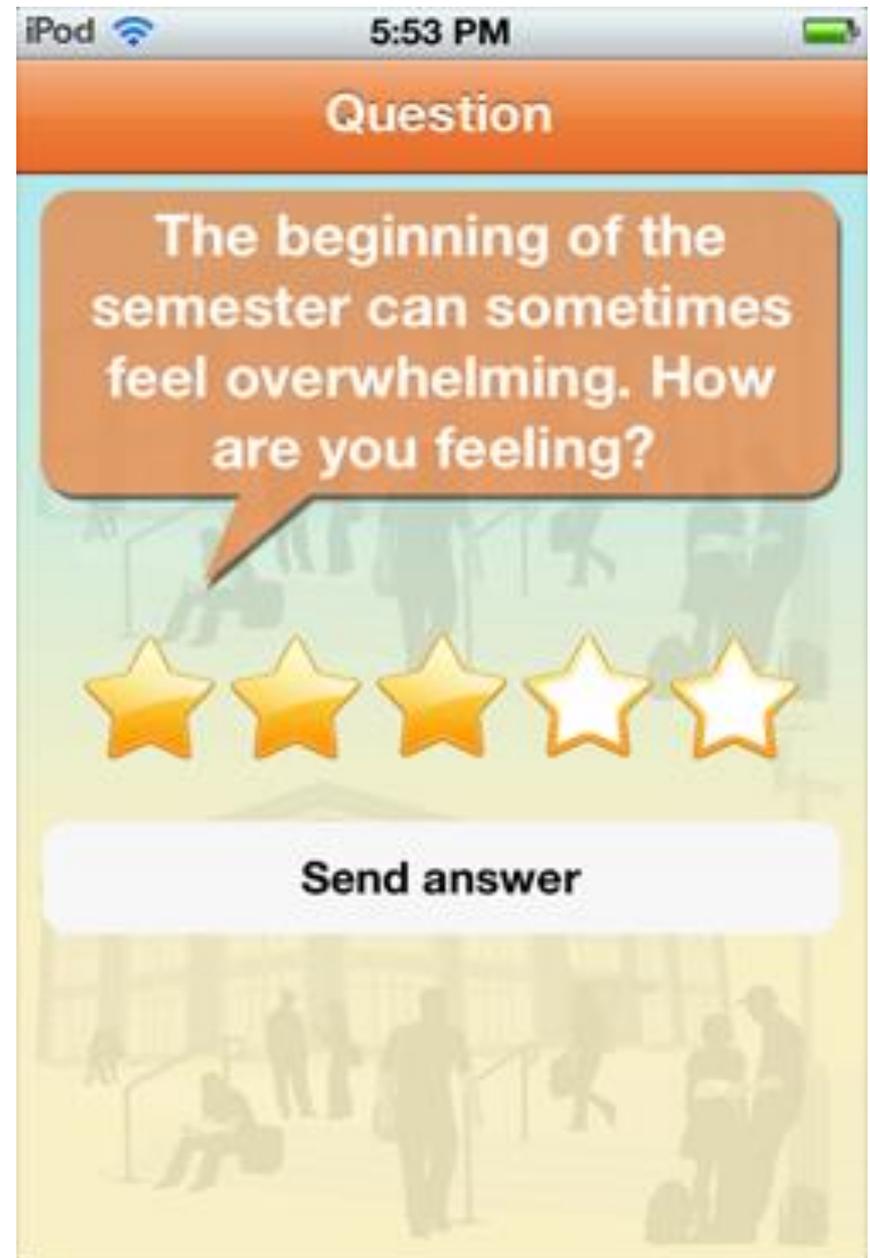
<http://chronicle.com/article/The-New-Traditional-on/135012/>

+ The next generation

- The NIH says that **environment** affects prefrontal cortex development, and due to protections now in place, American adolescence now **BIOLOGICALLY** extends into the late 20s.
- Adolescents are less prepared for focusing and functioning than ever before. They depend on guidance.



+ Support and Engagement via Mobile Text Messaging



Tailoring to student concerns

PERSISTENCE
+ PLUS

Students receiving differentiated support based on concern

What's your biggest concern about school right now?

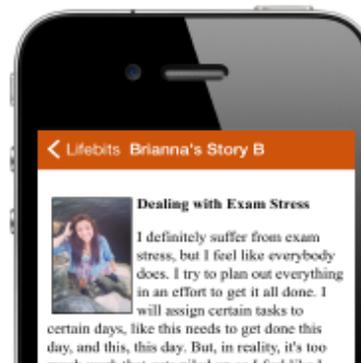
Struggling to keep up

Some UWT students tell us they're struggling with studying. What tips would you share?

A short 5 minute break every half hour of studying helps you study better as well as helps you become less stressed.

Stressed out

Lifebits: Brianna talks about planning ahead for exams to avoid stress



Don't belong

What is one way you helped a fellow UWT student this week?

Helped initiate study groups

Led a small group math discussion

Looking to the LMS

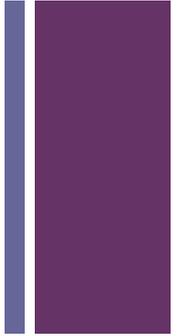
+



+ CANVAS!



+ **WHOLE Learner Support**



- Message Students Who _____
- View Course Analytics
- Outcome Gradebook, Learning Mastery

+ For any assignment or assessment

Message Students for Test 1



Message students who...

for Test 1

Scored less than out of 30

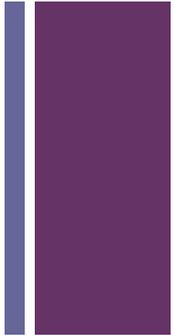
- Haven't submitted yet
- Haven't been graded
- Scored less than**
- Scored more than

Cancel

Send Message



Course Analytics



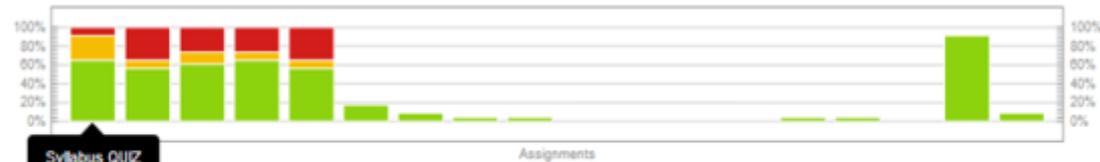
Activity

Each bar represents the number of **page views** on that day. An orange bar indicates that some user **took an action** within the course on that day.



Assignments

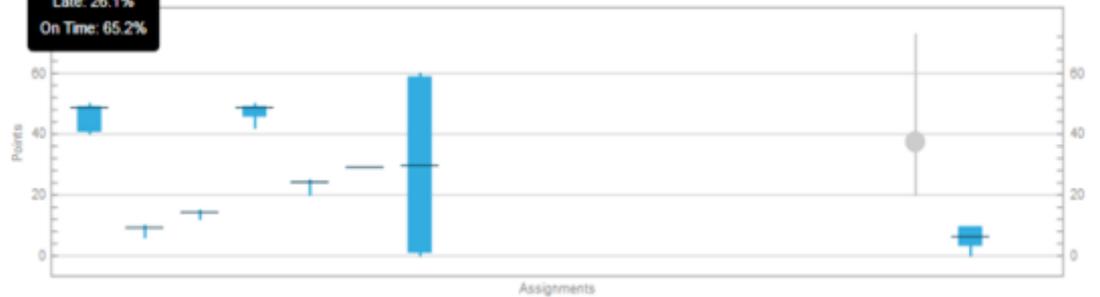
Each bar is an assignment. The green layer represents the percentage of students that turned in the assignment **on time**. Assignments that are **late** are yellow, and **missing** assignments are red.



Syllabus QUIZ
Due: Apr 6, 2014
Missing: 8.7%
Late: 26.1%
On Time: 65.2%

Grades

Each bar is one assignment. The **thin vertical whisker** extends from the lowest score for any student in the course to the highest score. The **thicker bar** extends from the 25th percentile to the 75th, with the **median** marked.



+ Learning Mastery

View Learning Mastery Gradebook

Course average	3.12 /3	3.25 /3	2.25 /3	3.25 /3
Learning Outcome	Can Do Math	Can Spell	Can Write	Can Read
Emily Boone Section 2	5 /3	5 /3	5 /3	5 /3
Jessica Doe Section 3	0 /3	5 /3	5 /3	5 /3
Max Johnson Section 1	5 /3	5 /3	3 /3	3 /3
Bruce Jones Section 2	3 /3	3 /3	0 /3	3 /3
Joe Rodgers Section 3	1 /3	0 /3	0 /3	2 /3
Nora Sanderson Section 1	3 /3	0 /3	0 /3	0 /3
Jane Smith Section 3	5 /3	5 /3	5 /3	5 /3
Canvas Student Section 2	3 /3	3 /3	0 /3	3 /3

Showing All Sections

mastery
near mastery
remedial

The Learning Mastery Gradebook is organized like the standard gradebook with the student names and sections on the left [1]. Similar to the standard gradebook, you can click a student's name to link to their Grades page. Each column consists of a course outcome and the outcome grade for each student [2]. Also like the standard gradebook, the columns can be sorted, resized, and reordered. The gradebook also contains a sidebar [3], which can be minimized and expanded by toggling the gray arrow icon at the top of the sidebar.



Q: How can we collectively learn and use new technologies and analytics to nudge our students to better performance and success?

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