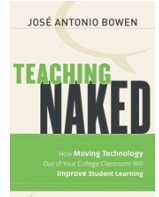
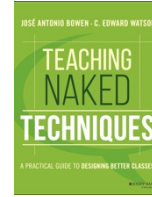
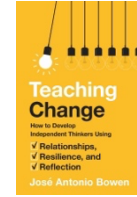
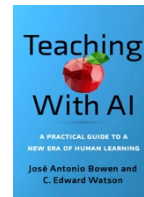


Nudges for Student Success

José Antonio Bowen



Nudges and Design Choices

Designs “that alter people's behavior in a predictable way without forbidding any options.”

Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving Decisions about Health, Wealth, and Happiness*

- Choice architecture = everything matters: there is no neutral design
- Nudge not noodge: Free to choose, but the default alters behavior
- Little changes can have a big difference

Frame and Default

- 1 Do NOT notify me about financial aid deadlines. (default NO)
- 2 Notify me about financial aid deadlines. (default YES)
- 3 Do NOT notify me about financial aid deadlines.(default BLANK)
- 4 Notify me about financial aid deadlines. (default BLANK)
- 5 Do NOT notify me about financial aid deadlines. (default YES)
- 6 Notify me about financial aid deadlines. (default NO)

Johnson, E. J. and Bellman, S. and Lohse, G. (2002). Defaults, Framing and Privacy: Why Opting In-Opting Out, *Marketing Letters* 13(1), pp. 5-15 (original with “health surveys”)



76.9%

89.2%

70.8%

88.5%

44.2%

59.9%

Iyengar, S.S., & Lepper, M.R. (2000). When Choice Is Demotivating: Can One Desire Too Much of a Good Thing? *Journal of Personality and Social Psychology* 79, 995-1006.

Johnson, E. J. and Bellman, S. and Lohse, G. (2002). Defaults, Framing and Privacy: Why Opting In-Opting Out, *Marketing Letters* 13(1), pp. 5-15 (original with “health surveys”)

Fewer Options?

Default Schedule?

Opt ins for next class or major?

All sections at the same time?

Learning is SWEET

- Sleep
- Water
- Exercise
- Eating
- Time

Sleep Nudges

- Info on Sleep Myths
- LMS Assignment times
- Programable LED Lighting
- Screens (habit tracker and lighting apps)
- Meal Times and Study Breaks
- Class Schedules

Registration and Schedule

- Students assigned to an early (7:30am) intro course were 10% less likely to major in a subject than students in a later time slot.
- Early classes have higher failure rates and lower grades.
- Having a course immediately before an intro course (with no break) had a similar effect (12% less like to major in that subject).
- Want more majors?

Haggag, Kareem & Patterson, Richard & Pope, Nolan G. & Feudo, Aaron (2021). "[Attribution Bias in Major Decisions: Evidence from the United States Military Academy](#)," *Journal of Public Economics* 200 (2021) 104445

55% of students say they've received guidance on required courses and course sequences needed for graduation via the advising process.

30% students say a course required for graduation wasn't offered the term they wanted to take it.

Inside Higher Ed/College Pulse survey of 3,004 college students, Feb 2023

There is no neutral.

Any way you present choices contains architecture.

Types of Nudges

- Choice Architecture
 - Quantity of Choices
 - Opt-in vs Opt-out
 - Default (Registration Nudges, Majors?)
- Goal Gradient (Grading?)
- Loss Aversion (Incentives and Rebates)
- Sunk-Cost Fallacy (Meta-Majors)
- The Course Cart (why Amazon works)
 - Exploring and putting things in your cart = FUN
 - Selecting = Cognitively HARD
 - "Save for later" has meaning
- Good Design = Anticipate Mistakes (ATM)
- Boomerang Effect, Social Norms and Emotions
- Emojis work!
- Mere-Measurement and Channel Factors

Hull, C. L. (1932). "The Goal-Gradient Hypothesis and Maze Learning," *Psychological Review*
 Kivetz, Urminsky, & Zheng (2006). The Goal-Gradient Hypothesis Resurrected: Purchase Acceleration, Illusory Goal Progress, and Customer Retention. *J of Marketing Research*, 43(1)

Academic environments are “procrastination friendly”
 Students procrastinate 2-3x MORE than those in the workplace
 Reduce Procrastination

- Motivation
- Reflection & Cognitive Wrappers
- More (& Smaller) Deadlines

Svartdal F., Dahl T. I., Gamst-Klaussen T., Koppenborg, M., Klingsieck, K. B. (2020). How Study Environments Foster Academic Procrastination: Overview and Recommendations” *Frontiers in Psychology* 11 10.3389/fpsyg.2020.540910

Miyake, A, & Kane, M. J. (2022) Toward a Holistic Approach to Reducing Academic Procrastination With Classroom Interventions *Current Directions in Psychological Science*. 31(4) 291–304

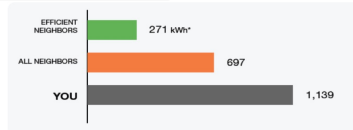


Social Norms

Last month you used 63% MORE electricity than your neighbors.

Your efficiency standing: **BELOW AVERAGE.**

This means that many of your neighbors in similar-sized homes used less electricity than you did. See the back of this report for some personalized suggestions to help you save significant energy and cost.



In the last 12 months you used 56% MORE than your neighbors.
 At today's rates this COSTS YOU ABOUT \$430 EXTRA PER YEAR.

Framing Matters

Dear [NAME],
 Good news! You are **eligible** for personalized career counseling from the Department of Veterans Affairs.

Dear [NAME],
 Good news! You have **earned** personalized career counseling from the Department of Veterans Affairs.



9% more Veterans clicked through

- Bhargava, Saurabh, and Dayanand Manoli. 2015. "Psychological Frictions and the Incomplete Take-Up of Social Benefits: Evidence from an IRS Field Experiment." *American Economic Review*, 105 (11): 3489-3529.
- Social and Behavioral Sciences Team, (2015). *Annual Report. Executive Office of the President National Science and Technology Council, Subcommittee on the Social and Behavioral Sciences Team. Obama White House Archives*
https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/sbst_2015_annual_report_final_9_14_15.pdf
- Schultz, P, et al. "The Constructive, Destructive and Reconstructive Power of Social Norms." *Psychological Science* 18 (2007): 429-34.

EMOJIS WORK!

(Emotions)

You use less energy than your neighbors

vs.

You use less energy than your neighbors



Intentions: Mere-Measurement Effect
 Greenwald, A.
 "Increasing Voting Behavior by Asking People if They Expect to Vote" *Journal of Applied Psychology* 2 (1987): 315-18

Study More!

Weekly survey of study habits

How many hours did you study

How did you study?

Feedback

You are studying X hours less than the average first-year

You are studying Y hours less than the average A student

You studied more than the average student!

- What are some current nudges your campus/course creates? (Good and Bad)
- What might you change?

AI Links and Prompts:

<https://teachingnaked.com/prompts/>

You can copy and paste all of the prompts from the same webpage.

<https://teachingnaked.com/prompts/>



Claude
3.5 Sonnet

+



or

Gemini

or

Copilot

+



or



HuggingChat

or

LATIMER

You are an expert in nudging and student success. Inspired by the ideas around libertarian paternalism and research in the book *Nudge: Improving Decisions about Health, Wealth, and Happiness* by Richard H. Thaler and Cass R. Sunstein (published in 2008 and revised in 2021), you use psychology and behavioral economics research to engineer choice architecture to nudge students to alter their behavior in a predictable way that will encourage student success without restricting options or significantly changing their economic incentives. You understand that the best nudges require minimal intervention and are cheap. Help me come up with new nudges to help students succeed at the University of X. Specifically, how might we nudge and encourage students to do Y or encourage behavior Z...

Set up Better Choices

- Choice Overload (Class & club selection)
- Just-in-Time Information (Career Program)
- Status Quo Bias (First-day seating)
- Defaults (You've declared a major, here are next semester's courses)
- Opt in/Opt out (Advisor appointments)
- Measurement (Are you going to study tonight?)
- Implementation Intentions (Ask when and how)
- Social Norms (Everyone is studying for Bio tonight)
- Emotional Nudges (You've gone to class 5 days in a row!)
- Goal-Gradient (Nudge grading)
- Loss Aversion (Rebates, Grades)

Mobile Nudges (results from mHealth)

Specificity: You need to leave in 10 min to be on time for your next class given current traffic

Behavioral: Self-monitoring – Noom

Support: Social networks for everything

Gamification: Points! (Duolingo)

Immediate Action

Appointment and Deadline reminders

Financial Aid and Forms – [CLICK HERE](#) to finish

Do you need help registering for classes **REPLY** Yes or No

Personal

Names: “José, are you feeling better this week? Dr. M.”

From a real person/instructor

Purpose

X% of juniors who went to the job fair found an internship!

Y% of students found the review video helpful for the midterm 😊

Remove Barriers

I am here until midnight hoping to help you 😊

Channel Hierarchy

Text (Immediate) + App (Actions and Video)

Behavior and Study Time

- Sleep, Water, Exercise, Eating and Time
- The one who does the work, gets the benefit.
- Education is a DESIGN problem: to motivate, inspire, guide & consolidate
- Our goal is to design and integrate better to increase student capacity for learning.

Reflection Nudges

- Reflection Portfolios
- Cognitive Wrapper: Reflect, Compare, Adjust
- Structured Silence

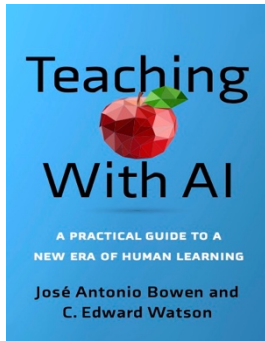
What behavior do you most want to encourage? So then...

What new nudges might you create?

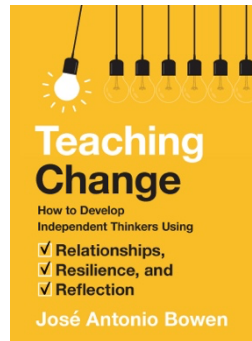
What service/reminder/deadline might we design differently?

Nudging with Space

- Creating Invitations
- Building Community
- Built Pedagogy
- Influencing Behavior



+



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at JHUP

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<https://www.press.jhu.edu/books/title/53869/teaching-ai>



MORE RESOURCES at www.teachnaked.com

More prompts and links at <https://teachnaked.com/prompts/>