Healthy Choices = Healthy Campuses

Point of Decision Design
2016 AIA Upjohn Grant Project

ABOUT HKs
HKS, Inc. is a team of more than 1,300 architects, interior designers, urban designers, scientists, artists, anthropologists and other professionals working together across industries and across the globe to create places that delight, heal and stimulate peak performance.

The firm has nurtured a culture of extraordinary people with curious and creative minds who are passionate about delivering elegant solutions. HKS has a dedicated research team that digs deep to discover processes and ideas that improve outcomes for everyone. In everything HKS does, it is mindful of the fragility of all life and of the planet.

www.hksinc.com

ABOUT CADRE
CADRE, the Center for Advancing Design through Research and Evaluation, is a 501c3 not-for-profit, organization that aspires to make research a catalyst for architectural innovation. Founded by HKS in 2008, CADRE investigates the impact of design on people, organizations and eco-systems, via industry and academic partnerships.

www.cadreresearch.org

ABOUT PLANNING4HEALTH SOLUTIONS
Planning4Health Solutions brings together experienced city planners, public health advisors, architects, landscape architects, designers, marketers and fund development experts to increase the understanding between community design and health. We work with cities, towns, neighborhoods, and campuses in making positive changes with a focus on community health and equity.

www.planning4healthsolutions.com
We seek to identify “tipping points,” defined as “the points at which a series of small changes or incidents becomes significant enough to cause larger, more important changes”.

**RESEARCH QUESTION**
Where are the tipping points on campus, the points-of-decision where students have the opportunity to make either healthy or unhealthy choices? And critically, how can design influence college student health choices by targeting points-of-decision?

**RESEARCH OBJECTIVES**
01 / To understand the chronic problem of obesity on college campuses and the link between campus design, diet and activity decisions.
02 / To discern where and how college students make decisions about physical activity and nutrition.
03 / To synthesize design strategies implemented at these points-of-decision to prompt healthy decisions amongst the myriad choices on typical college campuses.
04 / To generate a design guide for practitioners, to assist them in designing healthier campuses for students.
05 / To develop a concept for future research bringing together the fields of public health and architecture around point-of-decision design.

**THE CHALLENGE**
The rising obesity epidemic has a measurable impact on students’ mental health and academic performance. Research suggests that this is often due to poor habits that students develop in college, which they take forward to post-college life, as well. This establishes a critical window of influence that deserves our attention.

A key challenge for students that aids poor health habits and decision making, especially around diet and physical activity choices, is the environment. Can design help decision making by addressing the environment?

**CHANGING THE CONTEXT**
Utilizing a socio-ecological approach that takes advantage of human interactions within our environments, we see opportunities for providing environmental modifications that make healthy living, easy living. We argue that we need to change the context foundationally, to allow better choices.

**DESIGNING FOR "POINT OF DECISION"**
Even with better environments, students face many daily choices that directly impact their health and wellbeing. The premise of point-of-decision design (PODD), is that healthy decision-making can be “prompted” by our physical environments by effective design interventions at critical points-of-decision throughout the college campus.

**THE CONTEXT**
US college campuses have become obesogenic environments, or in other words, places that contribute to obesity.

We seek to identify “tipping points,” defined as “the points at which a series of small changes or incidents becomes significant enough to cause larger, more important changes”.

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**POINTS OF DECISION**

**Student X**
- Walk to Class
- Bike to Class
- Drive to Class
- Take the Stairs
- Take the Elevator
- Cook Lunch
- Dining Hall Buffet
- Fast Food
- Vending Machine

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How and where do students make decisions?

WHAT WE LEARNED
01 / Current literature on designing healthy campuses focuses more on movement and physical activity than diet. We see this gap as an opportunity for future design research.

02 / Current literature focuses on how a healthy context can be created, but not as much on how design can be a catalyst for health at key points of decision.

03 / Decisions about activity/diet could be made by students before ever stepping into campus. Leveraging technology/smartphones as part of the design solution is imperative.

04 / Point-of-decision is a person-centric—not a place-centric, construct. Understanding diverse user personas and mapping their journeys can aid in determining points of decision.

05 / Behavioral decisions students make are often influenced by four key constructs: availability, access, affordability, and appeal.

06 / Design strategies to address a person-centered framework must be considered along a design continuum ranging from information and product design to interior, architecture and urban design.

LITERATURE REVIEW
Our team conducted a literature review to understand existing design strategies that target better health on college campuses, with a particular eye toward identifying any research that linked health to student decision-making. We discovered that point-of-decision design was used by the Centers for Disease Control (CDC) to promote tobacco cessation, and also to encourage greater use of stairs. However, point-of-decision design has not been extensively incorporated by the design community, and has not been used to assess the points where design could have the greatest health impacts for college students. Combined with the field of behavioral economics and “nudge” architecture, PODD could be a compelling design tool.

IDEATION SESSION
Informed by the literature review, we led a cross-disciplinary Ideation Session comprising 40 participants from across the United States. Participants included campus facilities planners, architects, designers, public health and student health experts, and undergraduate and graduate students. In this session, we discussed critical points-of-decision on college campuses (using user personas and day in the life of exercises) and deliberated upon point-of-decision design strategies across a design continuum, that would promote healthy choices.

PARTICIPANT SURVEY
Following the Ideation Session, we sent a follow-up survey to all attendees of the Ideation Session to clarify themes that emerged from conversation. Integrating prior research and the session results.

SYNTHESIS
Integrating prior research and the session results the team synthesized the results into a “Visual Design Guide” and a detailed report.

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12 / Design strategies to address a person-centered framework must be considered along a design continuum ranging from information and product design to interior, architecture and urban design.

13 / 14 points of decision emerged from the study including the smartphone, bedroom, path, car, corridor, etc. 24 design strategies emerged from the study including farmers’ markets, communal kitchens, healthy food offerings and placement, hydration stations, recharge zones, etc.

[See Visual Design Guide for detailed list]. Every campus must create its own PODD framework that is culturally sensitive and context specific.

14 POINTS OF DECISION
Smartphone Path Home Dining Courtyard Bed Car Corridor Recreation Center Classroom Parking Public Space Workstation Online

INFLUENTIAL FACTORS
Access Availability

Healthy Choices = Healthy Campuses
What can colleges do to create healthy choices for students?

4 STEPS TO POINT OF DECISION DESIGN ON COLLEGE CAMPUSES

01 / Know Your Students
02 / Locate Student Points of Decision
03 / Identify Influential Factors
04 / Define Your Design Strategies

24 STRATEGIES ACROSS THE DESIGN CONTINUUM

WHAT THE FINDINGS MEAN

In summary, our findings are a call for designers to take a person-centered approach to designing campuses, and to consider the design continuum that spans from information design, environmental graphic design and product design to interior design, architecture and urban design.

The research suggests that at every point of decision, and from the scale of the campus to the scale of a handheld device, design can promote healthy choices. Leveraging PODD is not about taking a prescriptive approach, but rather a process of discovery that is context specific and culturally sensitive.

VISUAL DESIGN GUIDE

Combining and analyzing our findings from the literature review, ideation session and participant survey, we created a visual design guide, comprised of specific design guidelines, and a step-by-step “how to” guide for higher education designers and planners to begin using Point of Decision Design today.

WHAT’S NEXT

This research project had a relatively small scope. Although the Ideation Session was cross-disciplinary, we would like to expand its breadth by including disciplines such as product design and behavioral economics to conduct more comprehensive sessions in the future that can hone (and test) the PODD framework.

Additional empirical research on student decision making, the role of the environment in these decisions and robust case studies are needed at a larger scale to investigate how design can go beyond creating a latent context, to becoming an active trigger that fundamentally changes health behaviors on college campuses.

ADDITIONAL INFORMATION

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DATE COMPLETED

2016

MAKE A DIFFERENCE

To learn more about how to leverage point-of-decision design to combat the obesity epidemic on college campuses, or collaborate on research on this topic, contact Upali Nanda, Associate Principal and Director of Research, HKS, at unanda@hksinc.com

http://tinyurl.com/healthycampuses