Design + Nursing + Business

Solving Healthcare Problems from the Grassroots

UNIVERSITY OF Cincinnati

livewell COLLABORATIVE

DESIGN + NURSING

INNOVATION IN HEALTHCARE

Design + Nursing + Business

American Public Health Association

October 2012 Annual Meeting

Undergraduate Public Health Education Panel

Roberta Lee, RN, MSN, MPH

Steven Doehler, BFA, MA

Bhavik Joshi, BE, MBA, MS

why?

Design + Nursing:

What's the connection?

Being "practice" disciplines, Nursing and Design are natural collaborators

Similar goals:
Nursing is focused on helping people maximize their function and wellbeing
Ultimate goal - helping people live their best lives.

Design is focused on creating products and services that make living better
ultimate goal - making lives better.

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Who makes it work

DAAP

- Steven Doehler: Asst. Professor Industrial Design

College of Nursing

- Evelyn Fitzwater: Asst. Professor Industrial Design
- Robin Lee:
- Charles Puchta
- Bonnie J. Brehm, PhD, RD, LD
- Yin Xu, PhD, RN

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How a topic is selected

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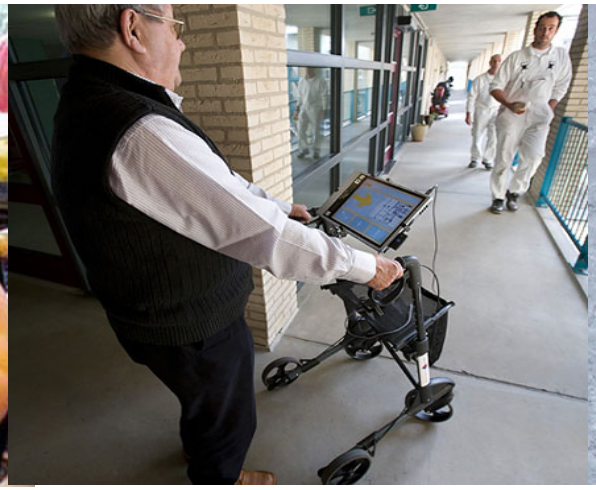
How a topic is selected



We start in the College of Nursing

Where do the ideas come from?

Pre-Course Development

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Common Processes

Design		Nursing
Research User centered research, task analysis Literature reviews, interviews and observations	**Research - Assessment**	**Assessment** complaints, symptoms, problems, etc.
Conceptualization (Identify) **Develop** concepts / **create**, design	**Conceptualization - Identify**	**Identify** problem (conceptualize) Plan Intervention (**develop/create**)
Validation of concepts: Validate with interviewees, end Users, experts (faculty, advisors)	**Validate**	**Validate** with patient (expert)
Implement plan (Prototype)	**Implement**	**Implement** plan (put nursing care plan (intervention) into practice)
Critique/Evaluate product/service design protocol	**Critique - Evaluate**	**Evaluate** (critique) outcome of intervention
Refine Consistantly iterating and refining	**Refine**	**Refine** intervention plan as needed
Re-Evaluate	**Re-Evaluate**	**Re-Evaluate**
Finalization	**Finalize**	**Finalize** revised plan

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Business + Marketing

Research	**Assess:** target audience, market potential, competitive landscape
Conceptualization	**Identify:** new growth opportunities **Develop:** positioning strategies
Validate	**Validate:** unique value propositions with target audience
Implement	**Implement:** test business plan & marketing prototypes in pilot market
Critique + Evaluate	**Evaluate**: sales in pilot market **Critique:** decision variables
Refine	**Refine:** business & marketing variables
Re-Evaluate	**Re-Evaluate**
Finalize	**Finalize**: strategic business & marketing plan for the year

common processes

Research-Role Play

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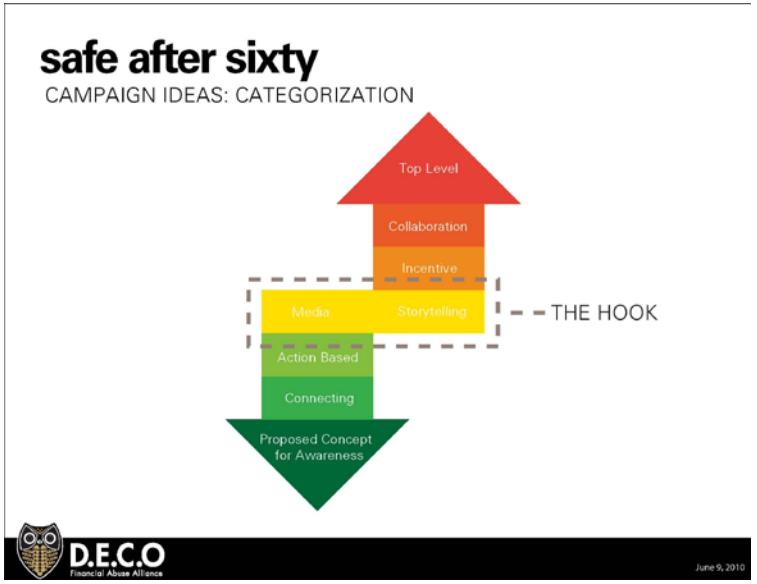
Research-Results



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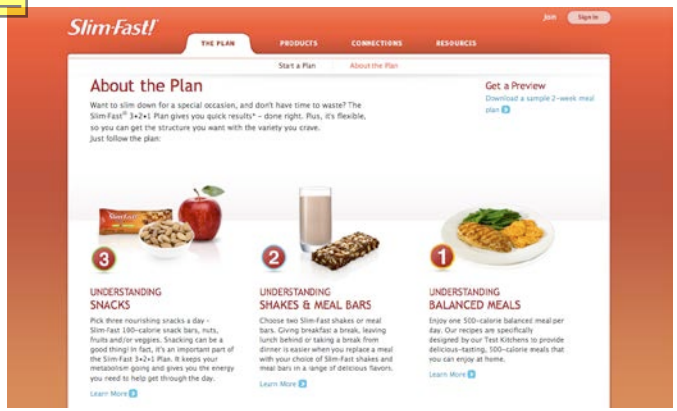
Business Results

To understand the entire process of new product development (from research to prototype), specifically the role of business & marketing in:

- Market & competition analysis
- Benchmarking
- Opportunity identification
- Qualitative research
- Positioning
- Validation



How to Use

CONSISTENCY IS KEY™

Use these helpful instructional tools to get started on a simple 3-step process to clear skin. To get the best results use twice daily.

STEP 1	STEP 2	STEP 3
Renewing Cleanser	Revitalizing Toner	Repairing Treatment
Directions: ▪ Use twice daily, morning and night. ▪ Treat whole face. Dampen skin. ▪ Apply a small amount (dime size) with gentle fingertip massage for 1-2 minutes. ▪ Rinse thoroughly with warm water. Pat dry.	**Directions:** ▪ Use twice daily, morning and night. ▪ Treat whole face. Apply small amount (dime size) with cotton ball or pad. ▪ Allow to dry. Do not rinse off.	**Directions:** ▪ Use twice daily, morning and night. ▪ Apply small amount (pea size) with fingertips on any affected areas. ▪ Allow to dry. Do not rinse off.
Note: The active ingredient benzoyl peroxide can bleach color from fabrics.	**Note:** Your skin may become more sensitive to the sun's UV rays, so apply sunscreen during the day.	**Note:** The active ingredient benzoyl peroxide can bleach color from fabrics.

Business: research-product benchmarking

Business: research- in-store benchmarking

Community Health as a Partner

The community health nurse partners with **individuals, families, and groups** with the goal of enhancing the health and well-being of populations and aggregates.

Population groups | Sub-populations | Individuals | Families

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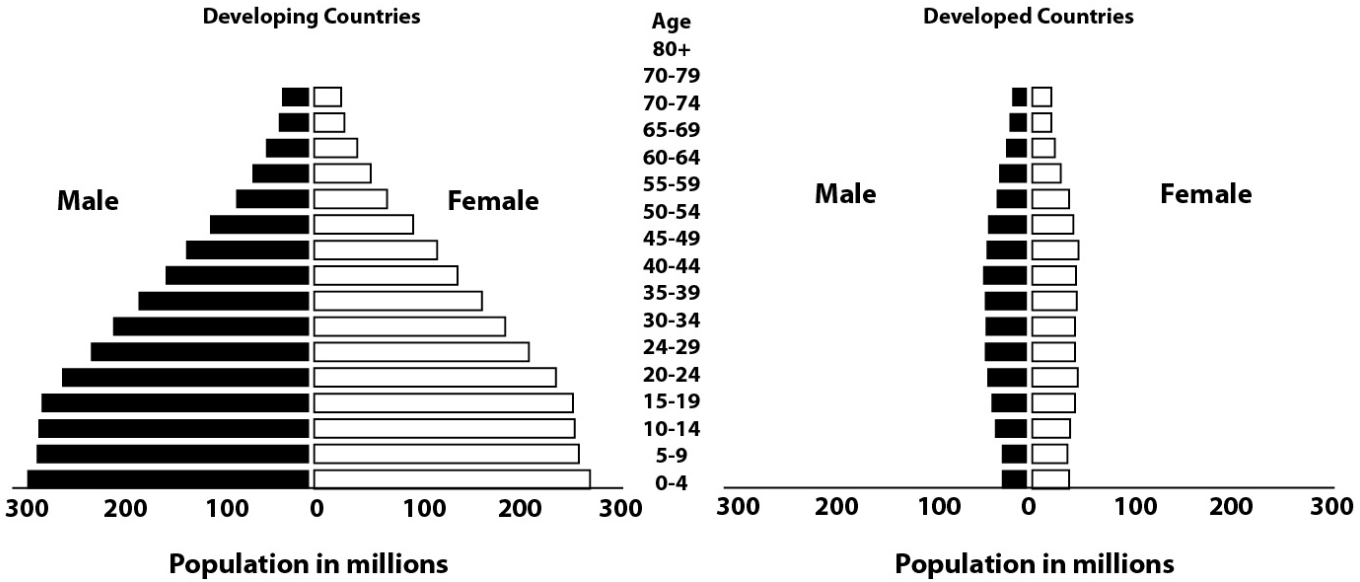
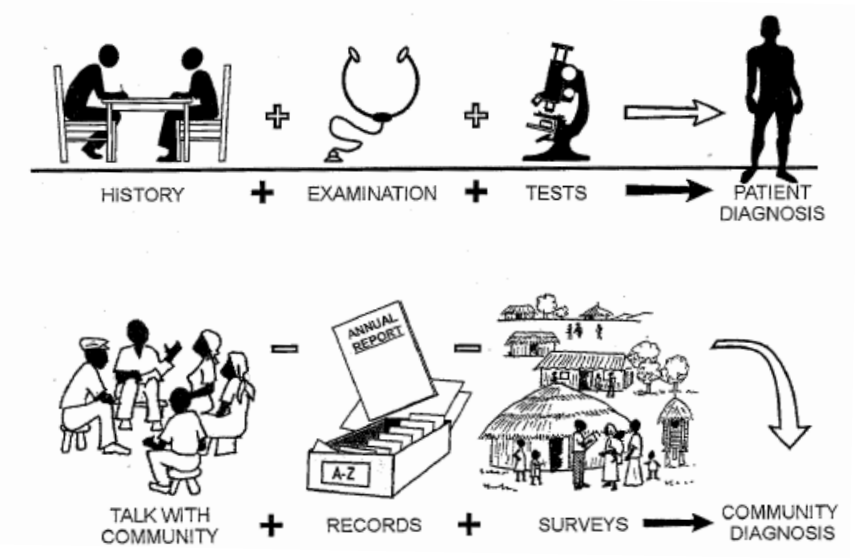
Community Health as a Partner





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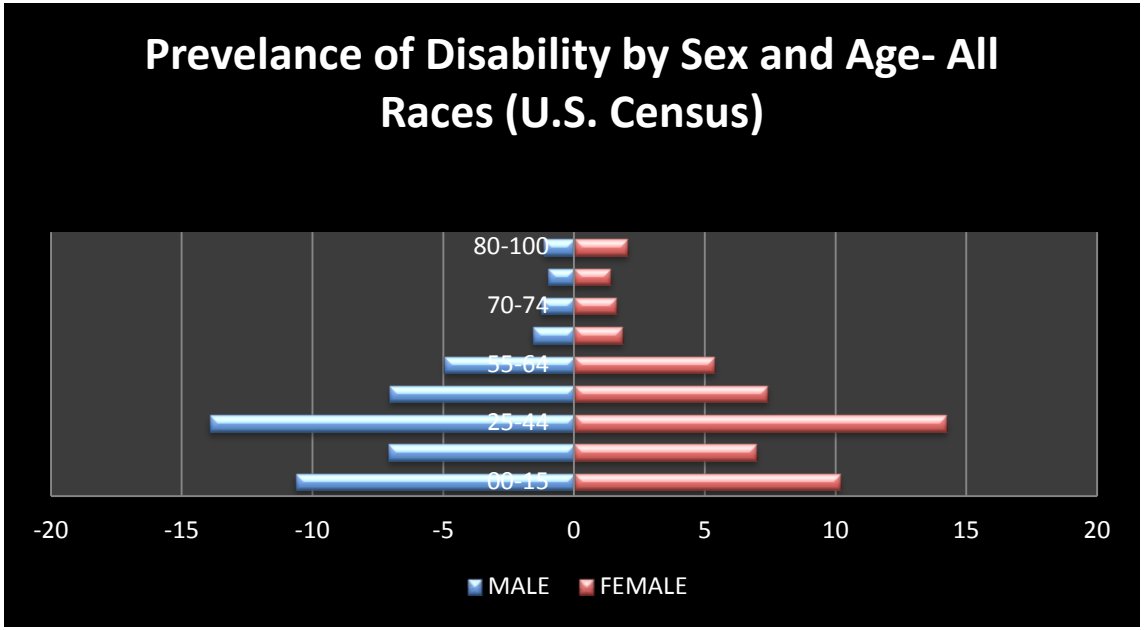
Community Health as a Partner

Mobility Design Project

291,098 disabled
people (U.S. Census)

- 142,405 Men
- 148,693 Women

- **82,069 are ages 25-44**



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Conceptualization results

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Final Results

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s conceptualizes topic

rm-Initial selection

vet reviewers determine D+N teams
rcialization CO-OP opportunity

ts Patent search

eview

DESIGN+HEALTH synergy
Commercialization CO-OP
Finalists

UC and student teams will jointly own IP after the CO-OP. Students will have the option to allow UC to negotiate on their behalf or the students to negotiate on behalf of UC. UC will limit its interest to 15% of the consideration earned.

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Commercialization support
UC-IP
Viable synergy
UC-Design
UC-Nursing

DESIGN+HEALTH synergy
CO-OP

Fully functional prototypes
Clinical intervention strategies
Pitch plan development
Establish corporate targets

10 weeks

Travel to make pitch

5 weeks

company A
company B
company C
company D

Connection is made

UC and Viable Synergy assist in licensing agreement

Key Take Aways

Students and Faculty and program enhancements:

Mutual faculty learning

Idea generation for faculty, graduate and undergraduate research

T2 Translational Research

Both programs are enriched

Design student quote:
"Crossing 2 worlds not only helped me as a designer to work with non-designers and I think it helps the nurses as well"
Nurse student quote: "Really learned community health through this collaborative."

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The Future: 2+2=5

Commercialization

Social Marketing

Use commercial marketing techniques to Persuade people to change their behavior to improve their own lives

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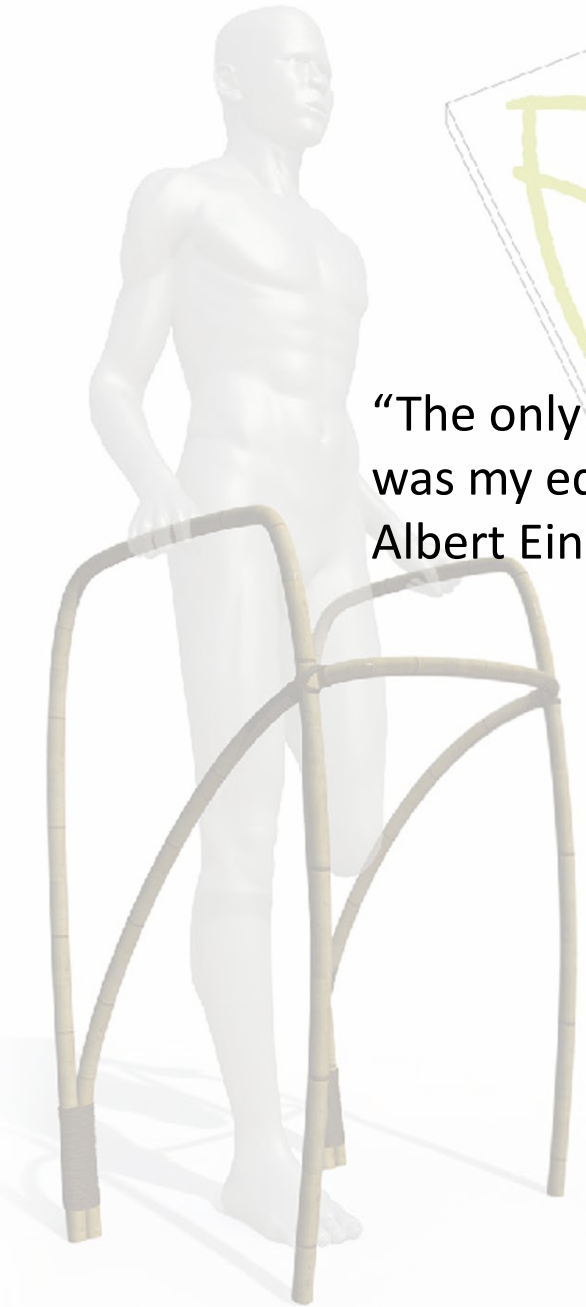

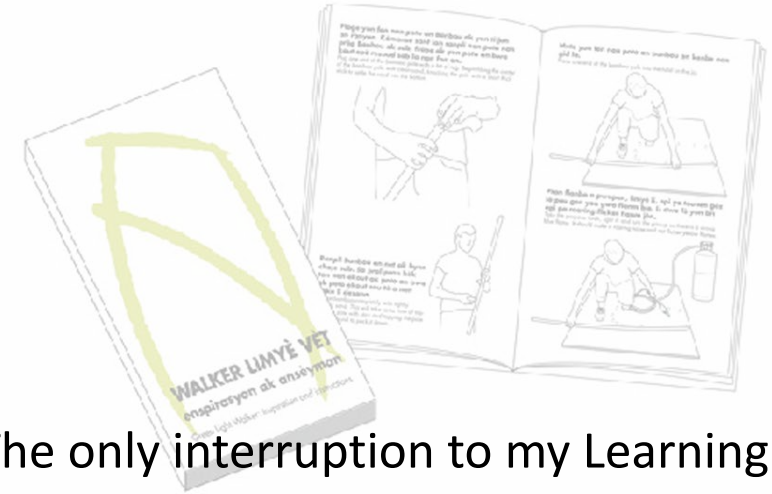

"The only interruption to my Learning was my education"
Albert Einstein

Thank You!

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