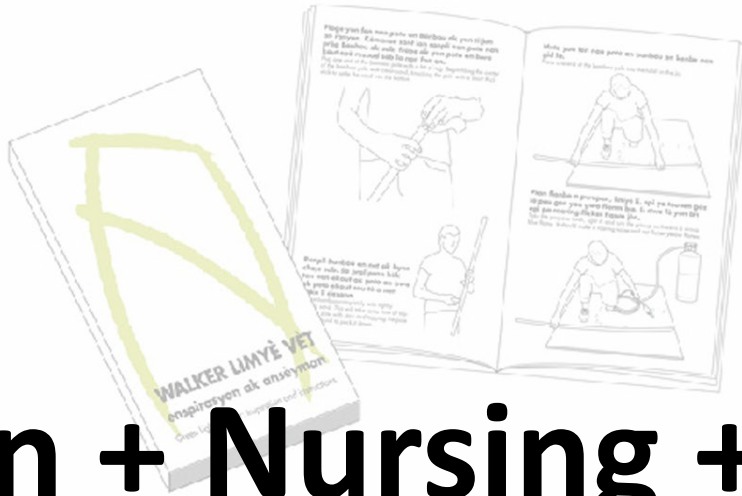


Design + Nursing + Business

Solving Healthcare Problems from the Grassroots



DESIGN  **NURSING**
I N N O V A T I O N I N H E A L T H C A R E

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.

DESIGN  **NURSING**
INNOVATION IN HEALTHCARE

Who makes it work



DAAP

- Steven Doehler: Asst. Professor Industrial Design



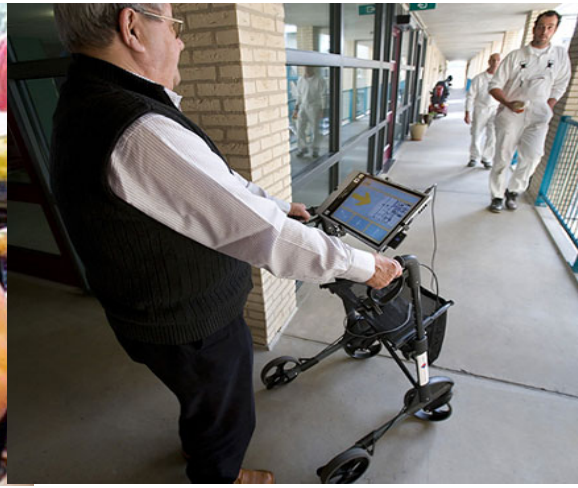
College of Nursing

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

How a topic is selected



How a topic is selected



We start in the College of Nursing

Where do the ideas come from?

Pre-Course Development

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 Consistently iterating and refining

Refine

Refine intervention plan as needed

Re-Evaluate

Re-Evaluate

Re-Evaluate

Finalization

Finalize

Finalize revised plan

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

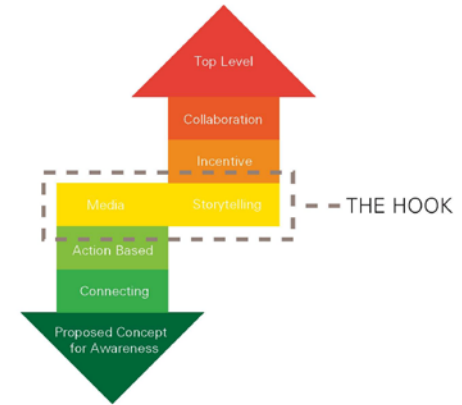


Research-Results



safe after sixty

CAMPAIGN IDEAS: CATEGORIZATION



June 9, 2010

safe after sixty

SITUATIONAL PROFILES

highly vulnerable



THE SELF-NEGLECTED

Self-neglect occurs when older adults are unwilling or unable to care for themselves due to mental confusion or physical inability. This person may not have anyone involved in assisting them with managing daily and life routines, and therefore, is in a state of extreme vulnerability.



THE CO-DEPENDENT

Co-dependency, on a family member or caregiver, occurs when an older adult reaches a state where they can no longer manage their personal life and seeks assistance. This then puts the person in a situation for potential psychological abuse and financial exploitation, creating a level of high vulnerability and high-risk.



THE SERVICE RELIANT

Becoming reliant upon professional care services, health organizations, and financial advisors is another form of co-dependence in the management of an older adult's personal life. However, within this situation, the person is in a highly safeguarded, protective and low-risk state of exploitation and abuse.

safe and secure



THE INDEPENDENT

The independent older adult is currently in a state where they are in control of managing their personal life routines and finances. They are not vulnerable however, are closely reaching the next stage of their life and the challenges it will bring, making them a viable stakeholder in an awareness campaign.



June 9, 2010

safe after sixty

RIPPLE EFFECT

WITH AN AVERAGE **\$375** LOSS FROM EACH VICTIM

annually this amounts to:

PNC Bank would lose **\$2 million** in Ohio alone.

\$96.2 MILLION in Ohio



June 9, 2010

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

Slim-Fast!

THE PLAN PRODUCTS CONNECTIONS RESOURCES

Start a Plan About the Plan

About the Plan

Want to slim-down for a special occasion, and don't have time to waste? The Slim-Fast® 3+2-1 Plan gives you quick results* - done right. Plus, it's flexible, so you can get the structure you want with the variety you crave. Just follow the plan:

Get a Preview
Download a sample 2-week meal plan

3

UNDERSTANDING SNACKS

Pick three nourishing snacks a day - Slim-Fast 100-calorie snack bars, nuts, fruits and/or veggies. Snacking can be a good thing! In fact, it's an important part of the Slim-Fast 3+2-1 Plan. It keeps your metabolism going and gives you the energy you need to help get through the day.

[Learn More](#)

2

UNDERSTANDING SHAKES & MEAL BARS

Choose two Slim-Fast shakes or meal bars. Giving breakfast a break, leaving lunch behind or taking a break from dinner is easier when you replace a meal with your choice of Slim-Fast shakes and meal bars in a range of delicious flavors.

[Learn More](#)

1

UNDERSTANDING BALANCED MEALS

Enjoy one 500-calorie balanced meal per day. Our recipes are specifically designed by our Test Kitchens to provide delicious-tasting, 500-calorie meals that you can enjoy at home.

[Learn More](#)

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
<p>Renewing Cleanser</p> <p>1 RENEW CLEA</p> <p>Directions:</p> <ul style="list-style-type: none"> 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. <p><small>Note: The active ingredient benzoyl peroxide can bleach color from fabrics.</small></p>	<p>Revitalizing Toner</p> <p>2 REV TO</p> <p>Directions:</p> <ul style="list-style-type: none"> 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. <p><small>Note: Your skin may become more sensitive to the sun's UV rays, so apply sunscreen during the day.</small></p>	<p>Repairing Treatment</p> <p>3 RE T</p> <p>Directions:</p> <ul style="list-style-type: none"> Use twice daily, morning and night. Apply small amount (pea size) with fingertips on any affected areas. Allow to dry. Do not rinse off. <p><small>Note: The active ingredient benzoyl peroxide can bleach color from fabrics.</small></p>



07 cream cleanser/mask

40 toner

32 anti-acne treatment

Why this regimen is for you

G SERIES

G Series fuels your body before, during and after practice, training or competition. Be fueled to achieve your best every step of the way with this new line of products.

BEFORE

Gatorade Prime 31™ is pre-game fuel in a convenient and functional 4-oz. pouch. It is designed to be used in the 15 minutes before exercise to provide energy by maximizing the availability of carbohydrate energy to muscles at the beginning of a workout or competition.

DURING

By offering a scientifically proven blend of carbohydrates and key electrolytes, Gatorade Thirst Quencher is designed for use in the moment of activity to help athletes and active people hydrate, refuel and push through.

AFTER

Gatorade Recover 83™ is the first protein and carbohydrate beverage formulated with the consistency of a thirst quencher to provide hydration and muscle recovery benefits after exercise.

Shave.

Trim.

Hydrate.

Business: research-product benchmarking



Business: research- in-store benchmarking

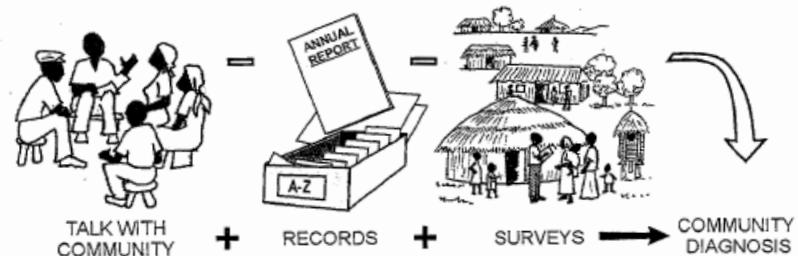
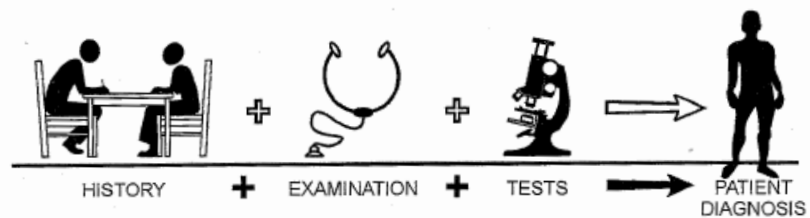
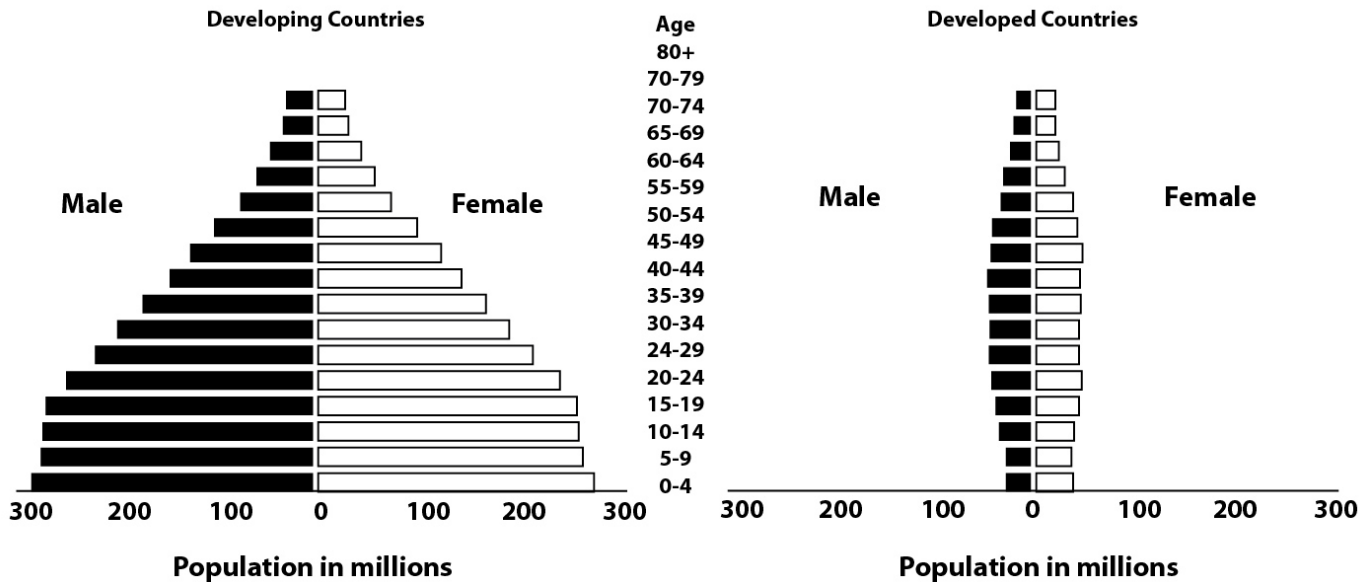
Community Health as a Partner

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

Community Health as a Partner



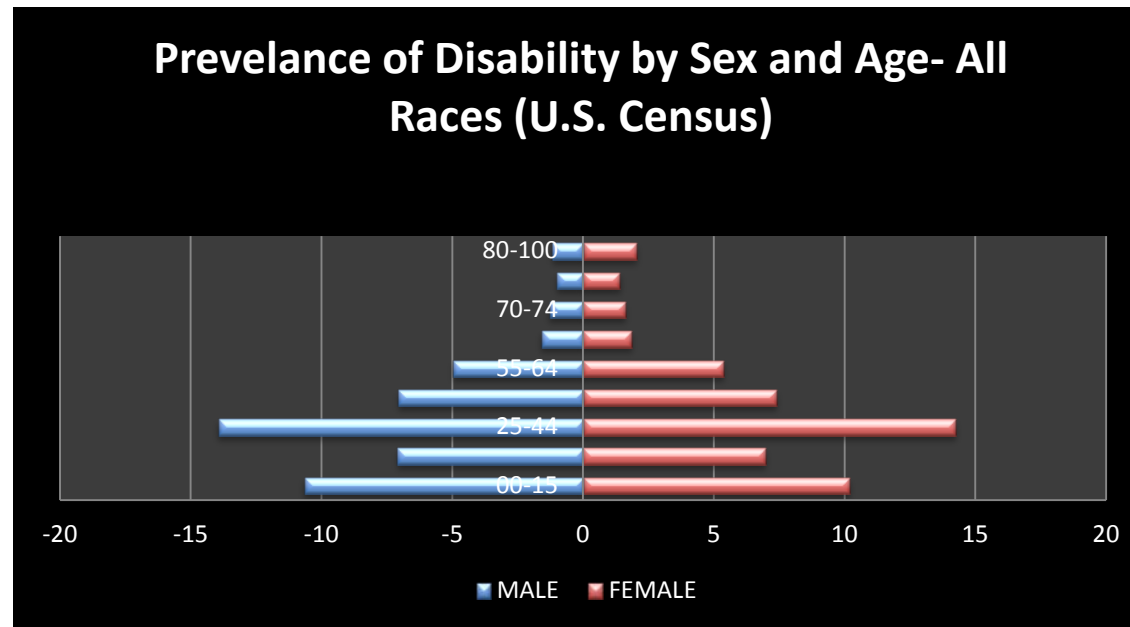
Community Health as a Partner

Mobility Design Project

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

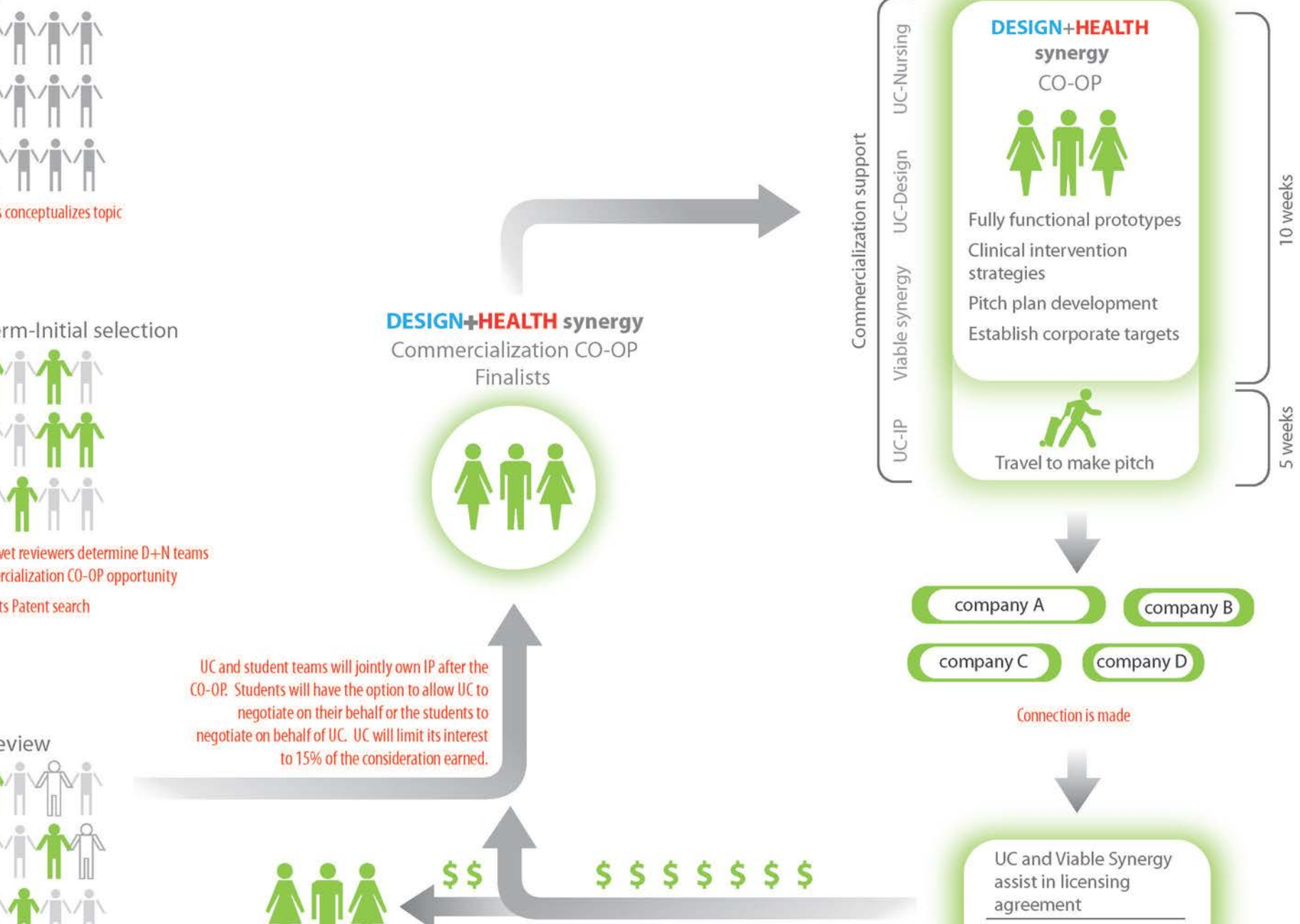
- 142,405 Men
- 148,693 Women

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



Conceptualization results





Key Take Aways

TRANSFORMING HEALTHCARE: ASSISTIVE MOBILITY DEVICES

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.”*

DESIGN  NURSING

The Future: $2+2=5$



Commercialization

Social Marketing

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



“The only interruption to my Learning
was my education”
Albert Einstein

Thank You!

