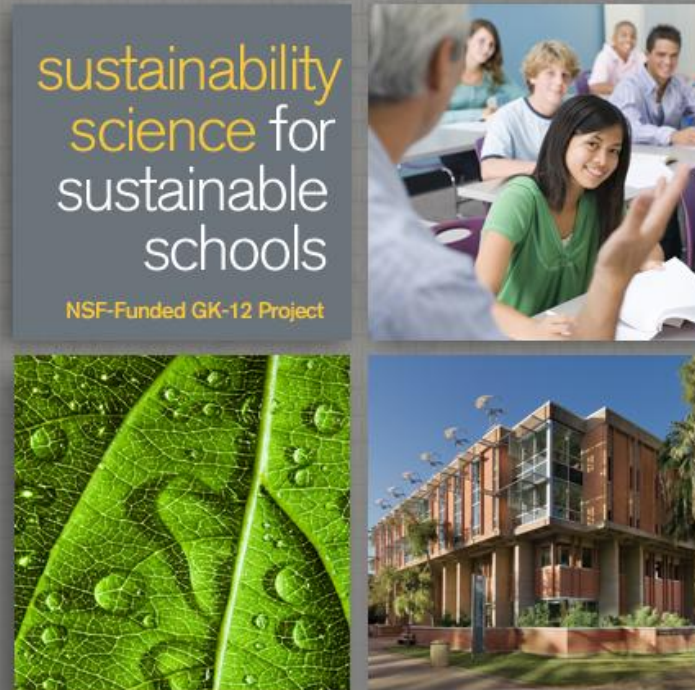


Educating for Transformative Action



Presented By: Erin Frisk
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School of Sustainability

Let's start with a story

- GOAL: Increase energy efficiency
- ACTION: Advertised the benefits of insulation
- RESULT: Spent more than the cost of upgrading targeted homes
- OUTCOME: Energy efficiency was unaltered

(McKenzie-Mohr, 2000)

Premise of Information & Attitude-Based Approaches to Sustainable Action

Only if We Care, We'll Act

“In the end, we will conserve only what we love. We only love what we understand. We only understand what we are taught.”

~Ecologist Babia Dioum Senegalese
(Donahue 2008; Purrenhage 2010)

“Only if we understand can we care. Only if we care will we help. Only if we help shall [chimpanzees] be saved.”

~Ecologist Jane Goodall
(Rimington 2010)

Educating for Sustainability

Faulty Assumptions & Behavior Change Failures

‘Information Deficit’ Model → Awareness > Concern > Action

- Knowledge will lead to change
 - Yet research has proven time & again otherwise

“[Environmental educators] still believe—so very strongly—in the **knowledge>attitude>behavior model** of learning when, at the same time, we know how desperately inadequate this is when it comes to changing the citizenship behaviors of large numbers of learners over long periods of time.”

~Dr. Harold Hungerford, a well-respected environmental educator
(Simmons and Volk, 2002: 7).

Moving beyond information but not abandoning knowledge

While researchers agree that *information alone* will not motivate someone to adopt a new behavior, it is clear that the lack of information can be a *barrier* to changing behavior (Monroe, 2003, pp. 118)

Beyond Traditional Informational Approach

4 Knowledge Domains

- 1) **Declarative:** scientific, technical, or mechanical understanding of how the world works → *****factual information*****
- 2) **Procedural:** knowledge about how best to do a particular activity to achieve behavioral outcome → ***how-to information***
- 3) **Effectiveness:** knowledge & awareness of outcomes for specific actions → ***perceived consequences/behavioral beliefs***
- 4) **Social:** understanding of peoples' expectations of un/acceptable or un/desirable behaviors → ***normative beliefs***

*****typical focus of education, yet least effective*****

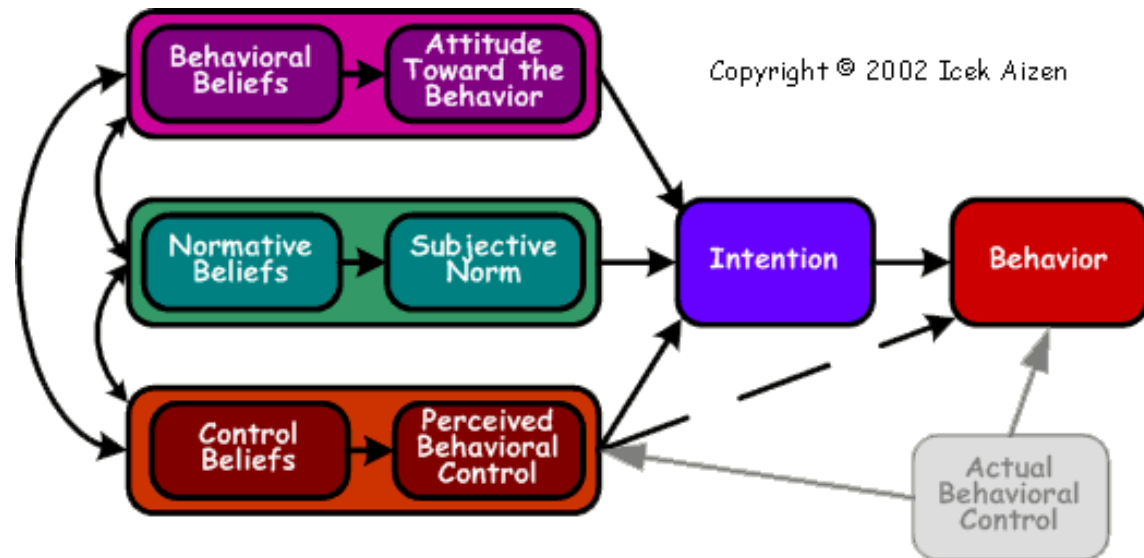
Drivers of Action for Sustainability

Psychological theories emphasize personal agency

→ *attitudinal factors, such as:*

- **Behavioral judgments**
 - Beliefs re: outcomes
 - Attitudes re: behaviors
- **Normative views re:**
 - What others expect
 - Pressures to conform
- **Control beliefs re:**
 - Ability to take action
 - Constraining factors

Ajzen et al.'s *Theory of Planned Behavior*

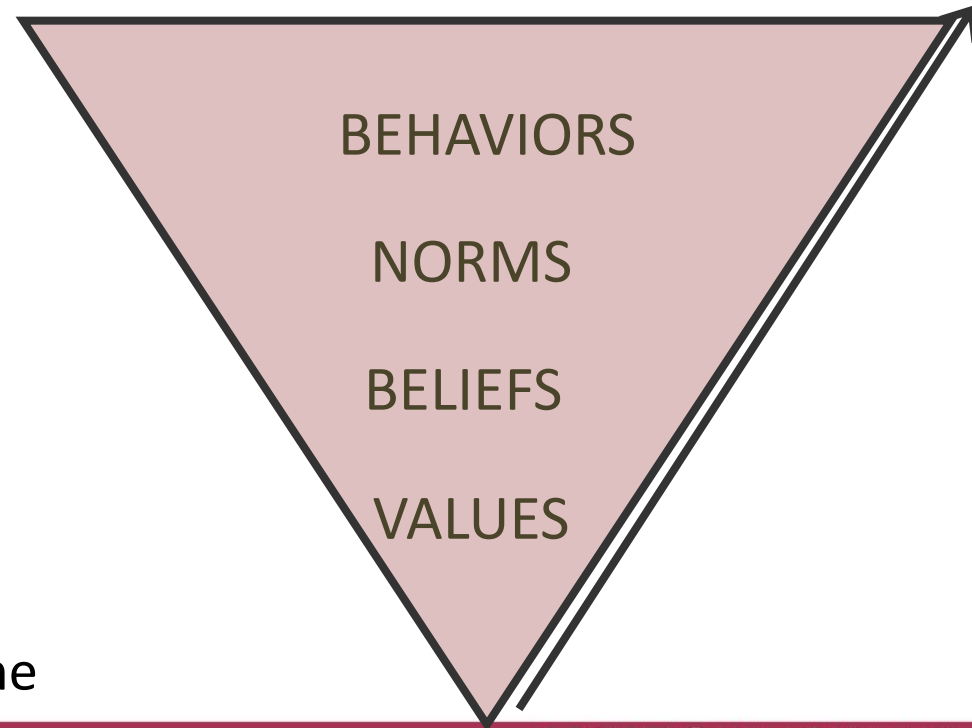


Drivers of Action for Sustainability

Attitudinal factors emphasized:

- **Values**
 - Selfish vs. altruistic
 - Biocentric vs. anthropocentric (ecological worldviews)
- **Beliefs**
 - Perceived consequences
 - Ascribed responsibility
- **Norms**
 - Sense of obligations
 - Desire to conform
- **Plus**, personal capability, context (situational forces), & habit/routine

Stern et al.'s Value—Belief—Norm Theory



What programs have been successful in motivating sustainable behavior change?

The most convincing and well-document
work in environmental behavior change
comes from community-based social
marketing campaigns



Fostering Sustainable Behavior
COMMUNITY-BASED SOCIAL MARKETING



Community-Based Social Marketing (CBSM)

A Situational Approach to Behavior Change

CBSM employs a holistic, context-specific approach:

1. *Identify barriers to specific behavior change*
2. *Design a strategy to remove barriers*
3. Pilot the strategy with various possible tools
4. Evaluate progress & outcomes



Tools used in CBSM Approach

Behavior Change Tools

- Public Commitments & Pledges
- Prompts
- Norm Development (modeling behavior)
- Incentives
- Convenience
- Diffusion Strategies

*Displaying collective impact of
individual commitments*



Instill & Reinforce Social Norms

How do Social Norms work?

- **Seeing others** performing the behavior
- **Being told** that others perform the behavior

Note: *tapping into people's desire to conform often has long-lasting effects & low costs.*

- Desire to **comply** (do what they *should*)
 - People want to receive positive feedback/rewards
...& to avoid negative feedback/punishments
- Desire to **conform** (do what others do)
 - People want to be seen as normal & to be prestigious/successful

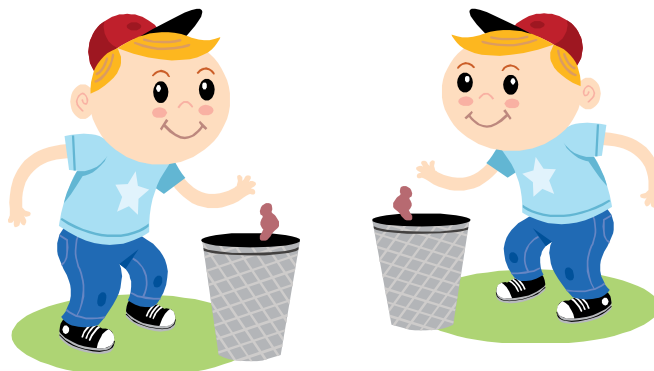


Instill & Reinforce Social Norms



Visual Notices

“This household composts”
“75% of your neighbors recycle”
“ You use more electricity than
70% of your neighbors”



Modeling Others

- Seeing others pick up litter
- Utilizing both DESCRIPTIVE & INJUNCTIVE norms

Use Prompts as Reminders

Point-of-Action

“Buy this returnable bottle”

“Recycled-content!”

“Turn off the light!”

Use very precise language:

“Buy recycled content paper”

Broad mantras e.g. “Think global, act local.” are NOT effective

Add Visual Interest

Catching the attention of passerby was shown to

increase the amount of litter disposed



CBSM: Strategy for Success:

Make it Convenient

**Preferential
Parking**



**Technology
Delivered
Free!**



**Curbside
Compost
Collection**



Utilizing CBSM Approach & Tools to promote Transformative Action in Education Programs

Example: Composting during my case study program

I. Identifying barriers to specific activities:

- Pre-Program Survey
- Household Survey

II. Design strategy to remove barriers:

Barriers cited were convenience, cost, lack of procedural knowledge, & odor



Education Strategy- Tools

III. Pilot Strategy with multiple tools

- A. *Convenience:* compost bin next to the garbage/recycling
- B. *Prompt:* poster directly over composting bin
- C. *Incentivizes:* Stars for being 'caught acting sustainably'
- D. *Habit & Norm building:* Composting every day!
- E. *Public Commitment & Pledge:* The students made public commitments to compost & pledged to share their commitment.
- F. *Providing necessary knowledge/skills:* Waste Audit & Building compost bins--also overcoming initial start-up costs.

Note: These strategies do not focus on information about methane or landfills as done in traditional education approaches

Education Strategy- Evaluation

IV. Evaluate Progress & Outcomes

- On the final day, the students parents came and all but one student took home composting bins (large outdoor or small indoor)
- Post-program survey: 100% of students stated that the program changed their waste behaviors
- Home visit (6 months after program): visually confirm that long-term change occurred



What would you do?

- The Student Recreation Complex is trying to promote the use of reusable water bottles
 - Currently, they have made refilling your water bottle convenient & they have posted signs around the gym explaining the environmental issues associated with using single-use disposables
 - What would you do to increase the use of reusable water bottles at the SRC?



Possibilities

- Focus on diverse values:
 - Rather than just putting up information about the environmental benefits, add information about the economic & social benefits
- Place Prompts on the water coolers:
 - Create a sign that says *'Ice-cold water for your refillable water bottle'* hence also creating an incentive
- Modeling Behavior
 - Make a refillable water bottle a part of the staff uniform
- Create a commitment wall of refillable water bottle users



*I commit to using a
refillable water bottle
-Erin Frisk*

Thank you!

- Questions?
- Comments?
- Discussion Points

Excellent Resource:

- <http://www.cbism.com/public/world.lasso>

Foster Social Diffusion

How do we speed up Social Diffusion?

- Spread the word & action thru social **networks**
 - What family & friends say & do matters
- Get early adopters to commit & target **key audiences**
 - Focus on opinion leaders & people with impact!
- *Factors affecting adoption:*
 - Relative **advantage** (increasing benefits)
 - Perceived **risks** (reducing costs)
 - **Complexity** (minimizing challenges)
 - **Compatibility** (addressing values & norms)
 - **Trialability** (allowing flexibility or trial periods)
 - **Observability** (ensuring visibility to others)





Foster Social Diffusion



Take Photos

*Smiling friends or colleagues
with reusable water bottles*



Mark Commitments

*Stickers or arm bands to
make people notice*

WE
COMPOST





Get them to Commit!

How does Commitment work?

Written & public commitments that require immediate action work best!

- People **desire consistency** in what they say they will do & what they do.
 - Voluntary, **snowball** effect
 - Work from **small** → **large** commitments

Get them to Commit!



If sticker first . . .



. . . 76% agree to billboard!

Sticker (Small)
→
Billboard (Big)



**"I'll do it &
I'll get my
neighbors to
do it too!"**

John Hancock

Communicate Effectively

How can we Communicate Effectively?

- Use **captivating** information
 - Vivid, conspicuous, interesting, relevant, concrete
- Keep it **short & sweet**
 - Clear, specific, easy to remember
- Know your **audience**
 - People want to be seen as normal
- Use a **personal** &/or **credible** source



Communicate Effectively

Vivid Comparisons

"If you added up all the cracks . . . you'd have a hole the size of a football in your living room"



Direct Contact

- Personal appeals
- Trusted sources
- Word-of-mouth



Provide Feedback

- How we're doing (energy, water savings etc.)

Lawn
34%



Toilet
20%



Laundry
15%



Kitchen
5%



Water Use in Your Home

Agriculture &
Conservation



Energy



Transportation



Waste &
Pollution



Water





Provide Incentives & Disincentives

How can we incentivize behavior?

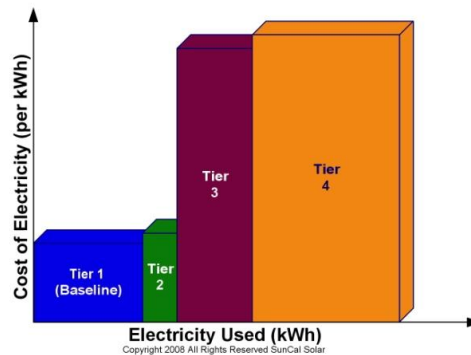
- **Payments or rewards** for adopters
 - *Financial*: rebates, block rates, time-of use rates, loans & grants
 - *Convenience*: time-savings, preferential treatment, stress-free
- **Fees or sanctions** for non-adopters
 - *Financial*: disposal fees, pollution taxes, etc.
 - *Inconvenience*: time-consuming, stressful, inconvenient
- Ensure **close pairing** of incentive & behavior
- **Beware**: problems if incentives removed
 - Incentives introduce *extrinsic* motivation.
 - If removed, people may not have *intrinsic* motive to continue!

Provide Incentives & Disincentives

**BYOB
Rebate**



**Block
Rates**



Traffic Calming

